

# Place, Participation, and Social Connection in Community Mental Health Centers: Understanding the Role of Environmental Features

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**USC** Chan HEAL  
Health Equity Action Lab

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# The Clubhouse Model

Fountain House



## CHARACTERISTICS OF THE MODEL

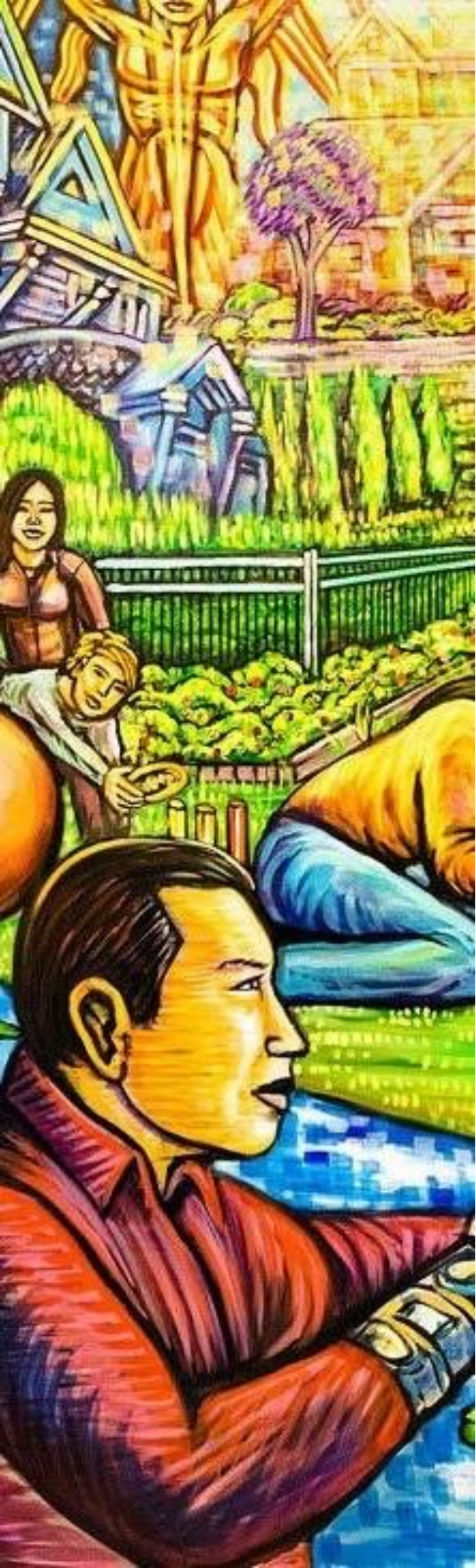
- Occupation-centered
- Member-developed in New York City
- Social and purpose-centered
- Non-clinical
- No “treatment” – mental health recovery is fostered through working together and building meaningful relationships

(Fountain House, 1999)

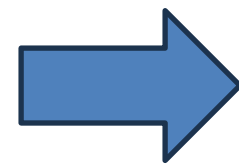
# CLUBHOUSES AROUND THE WORLD



Find one near you at Clubhouse International's Website – OR start one!



*Social connection is essential to overall health and recovery from mental illness.*



*How do we design spaces that foster social connection?*



# Introducing Social Architecture

## We know:

- Being in proximity to others is not sufficient to build relationships.
- Design of the built environment shapes behavior.

## We propose:

- Relationship building requires two primary behaviors:
  - Engagement in activity (occupation)
  - Reciprocal social interaction / collaboration

**Thus, we define social architecture as intentional design of the built environment to foster social connection through occupational engagement and reciprocal social interaction.**

# Development of a Novel Socio-Spatial Measure of Occupation

## Phase 1

3 Clubhouses (O'ahu and Hawai'i Island)

Activity Mapping Interviews  
(n=44)





Field Notes

Socio-spatial Observations  
(n=2554)



Surveys  
(n=144)

## Socio-spatial observation scale (Agner et al., in press)

### Level of Engagement in Activity

	Score	Definition	Examples
	<b>1 Idle</b>	No evidence of engagement	Sitting or standing not reacting to events. "Zoning-out."
	<b>2 Passive</b>	Passively observing others or consuming media.	Watching TV, watching YouTube, listening to music.
	<b>3 Low Active</b>	Body language demonstrates at least partial focus in activity.	Walking, eating, packing up a bag, organizing materials or scrolling.
	<b>4 High Active</b>	Body language demonstrates full focus in activity.	Cooking, working on the computer with full focus, exercising.

### Social Interaction

	<b>0 Solo</b>	Not interacting with others	Sitting or working alone
	<b>1 Group</b>	Interacting with others	Visibly talking, listening or working in a group with others

# Development of a Novel Socio-Spatial Measure of Occupation

## Phase 1

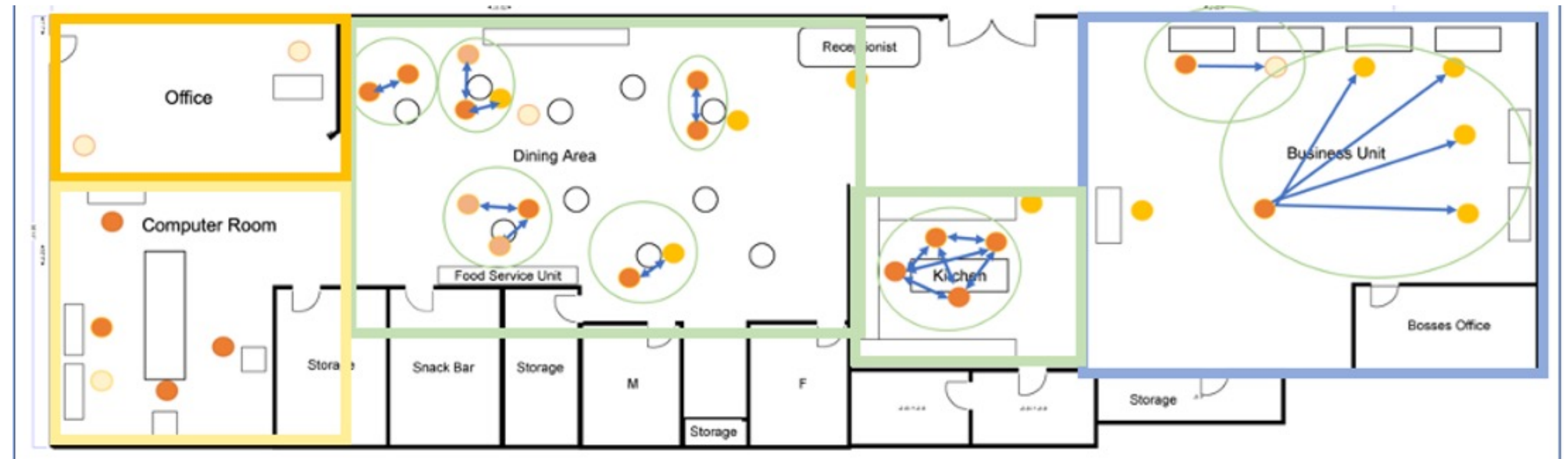
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# Development of a Novel Socio-Spatial Measure of Occupation

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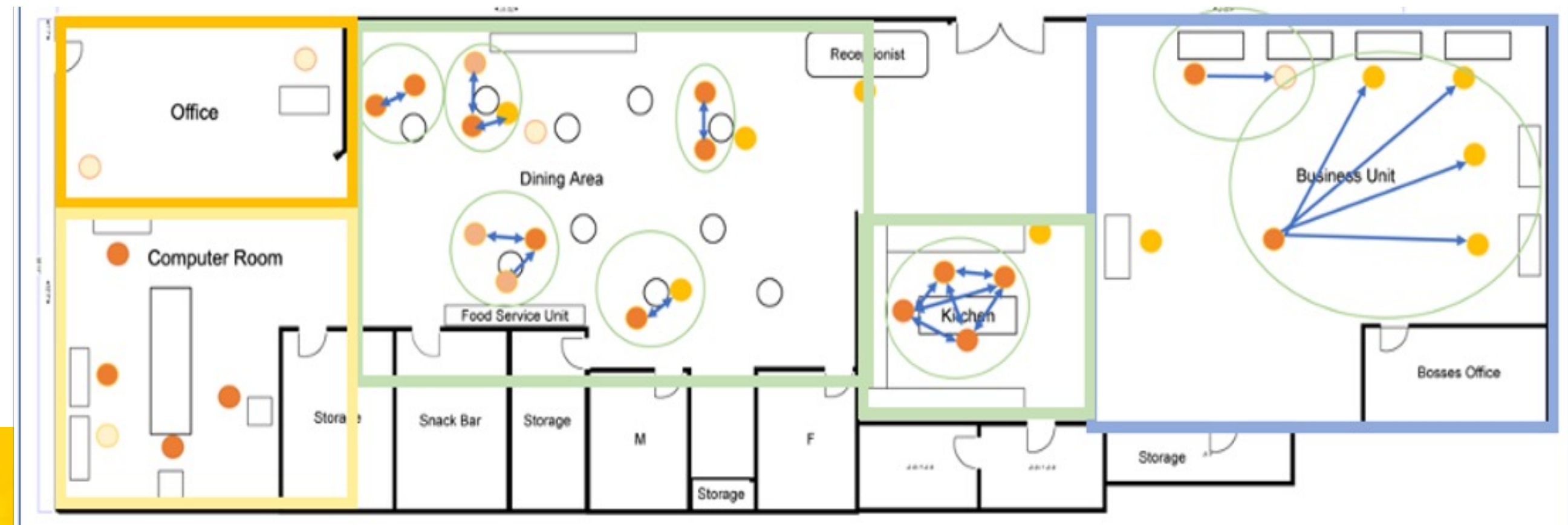
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Surveys (n=144)

## High inter-rater reliability

789 observations had two raters

- Intra-class coefficients:
  - .92 for level of activity engagement
  - .98 for social interaction
  - .80 for tone of the interaction (positive, neutral, or negative)



# Observed Occupational Engagement and Social Interaction Were Associated with a Sense of Mattering and Perceived Meaningful Engagement

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*Average observed level of engagement and frequency of social interactions were significantly correlated with **mattering** (feeling known, important, and relied upon) as well as **perceived meaningful engagement** in the Clubhouse. ( $p < .05$ )*



# Activity Mapping Interviews Provided Qualitative Context for Why People Engaged and Interacted in Some Spaces and Not Others

## Phase 1

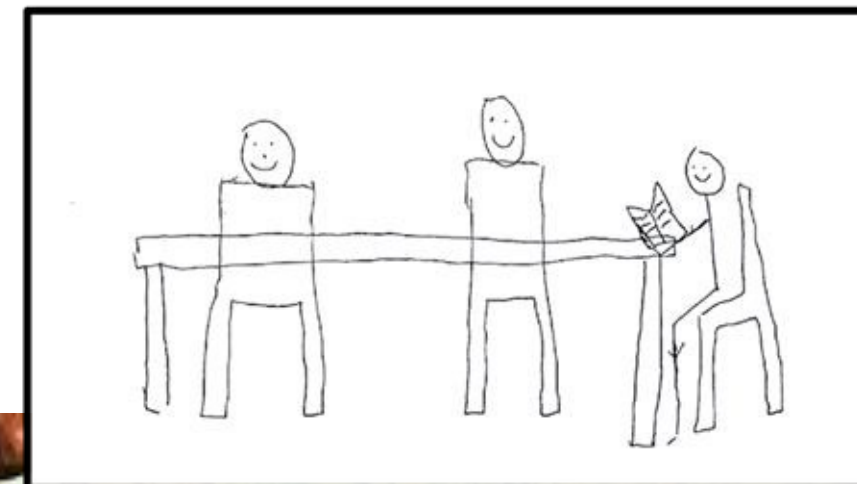
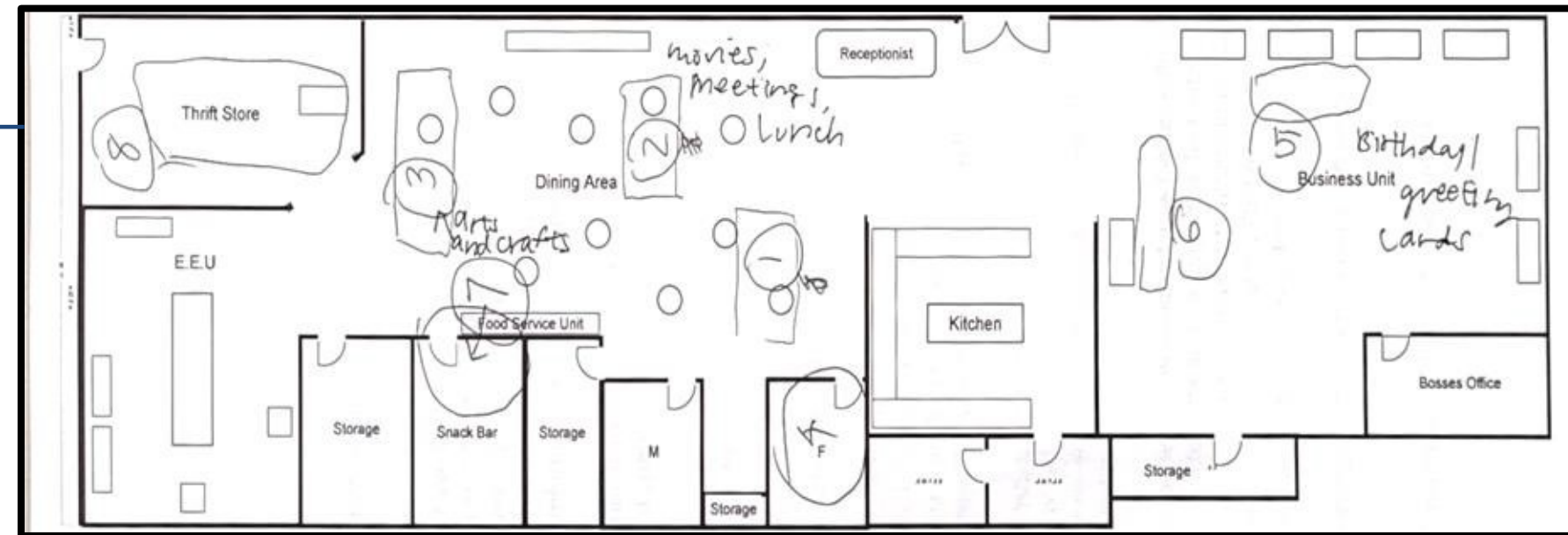
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### Example interview questions

- 1) "Where do you feel most engaged in activities in the Clubhouse?"
- 2) "Where do you interact the most with others in the Clubhouse?"
- 3) "Are there areas where you don't spend time or that feel off-limits to you?"



# Distinct Spatial Patterns in Occupational Engagement and Social Interaction Were Observed Within and Across Sites

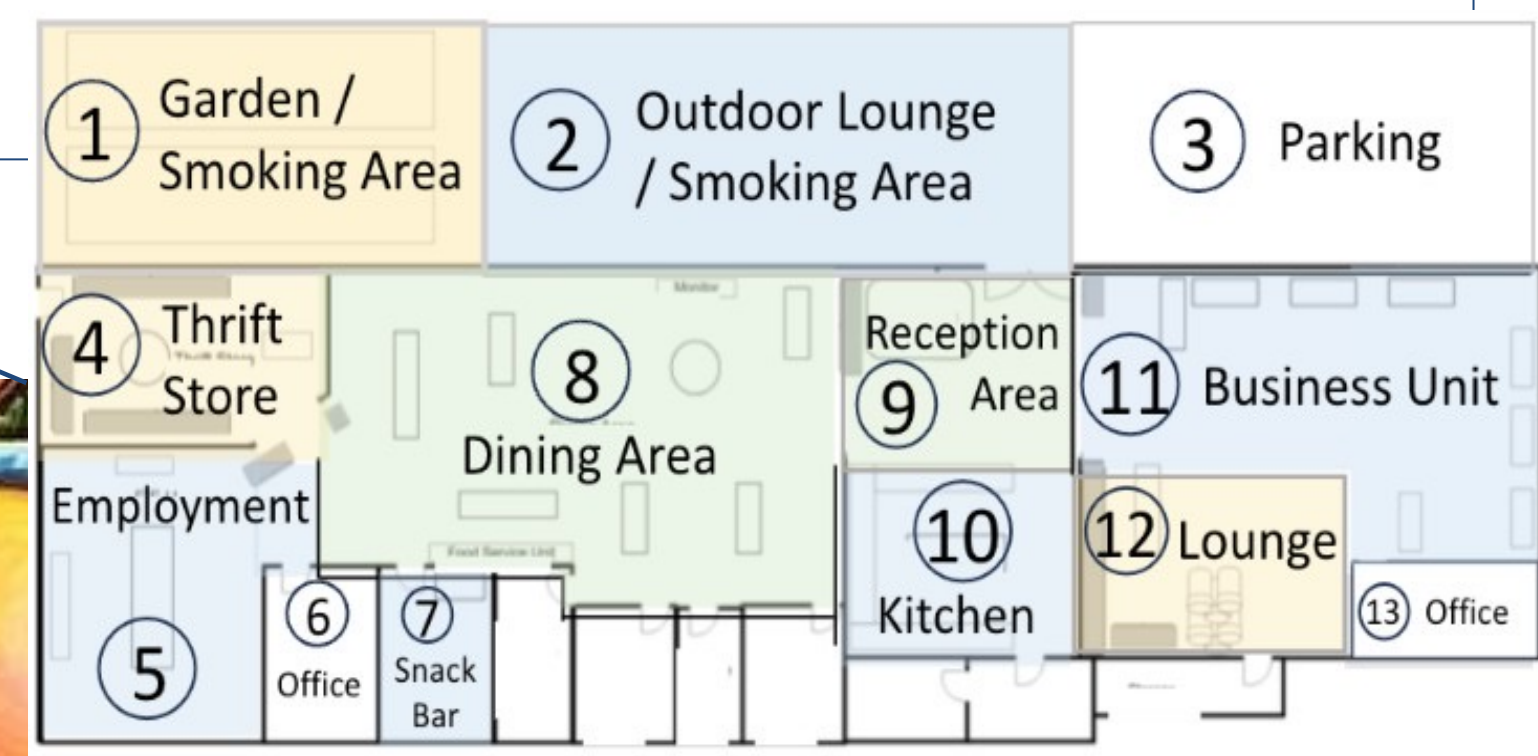
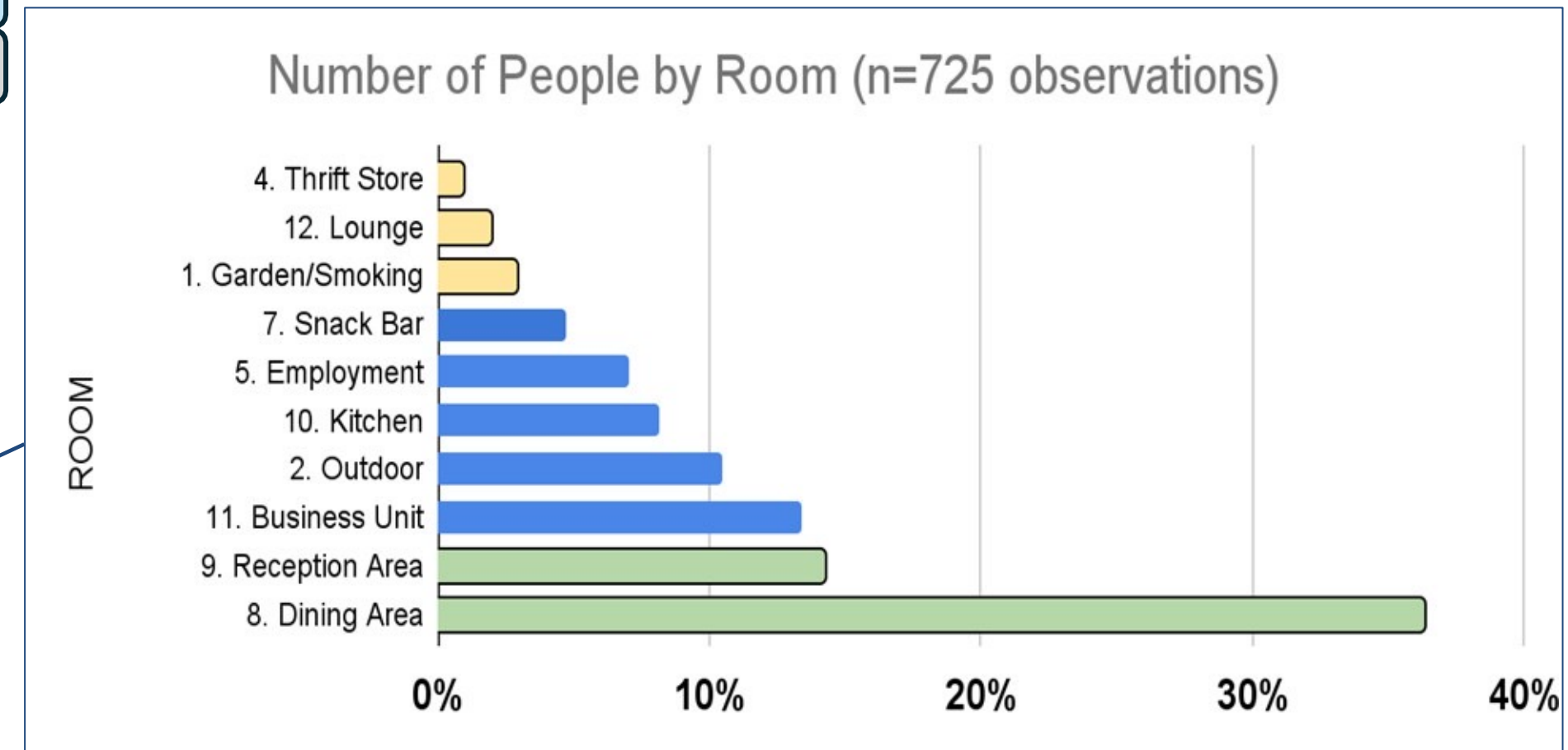
**Phase 1**  
3 Clubhouses (O'ahu and Hawai'i Island)

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# Interview Data Linked Closely with Observed Spatial Patterns in Occupational Engagement and Social Interaction

## Phase 1

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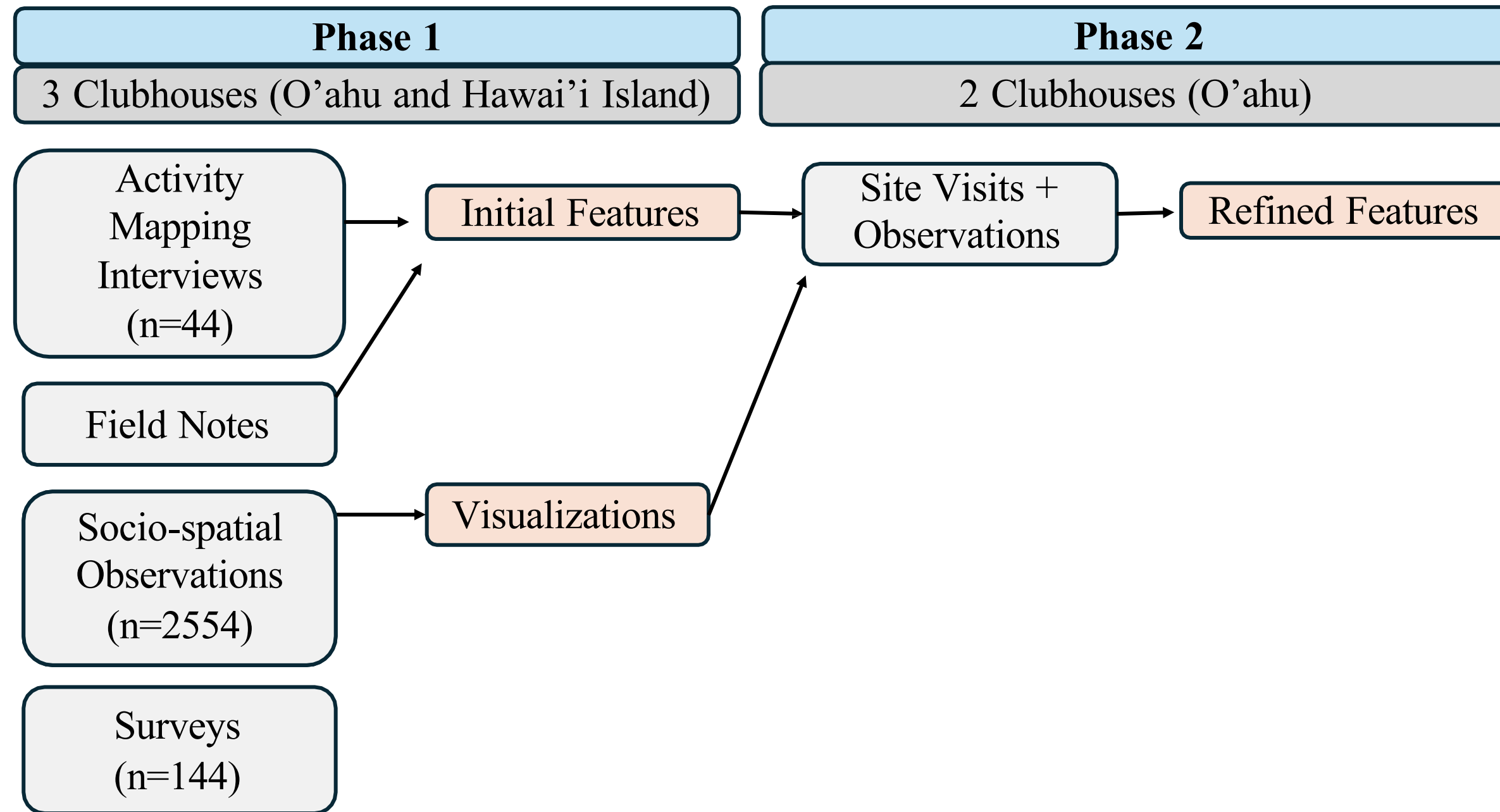


*Low and High Engagement and Social Interaction Areas*

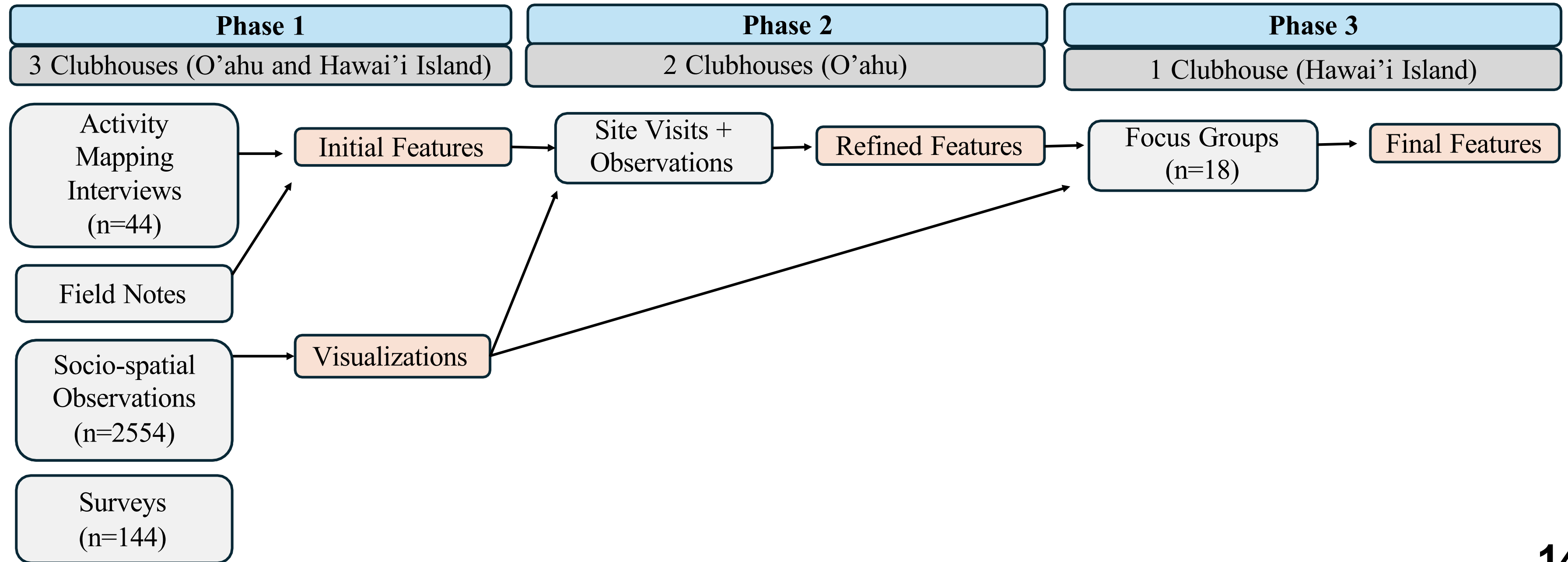
Participants identified “dead zones” as areas that did not support engagement and could benefit from modification. They provided concrete strategies for adaptation, and 75% of the proposed adaptations were in areas that we identified as dead zones through our observations.



# Qualitative and Quantitative Data were Used to Develop an Initial Set of Social Architecture Domains and Features



# These Social Architecture Domains were Refined through a Second Round of Observations on Site and Focus Groups with Clubhouse Members



# Social Architecture Domains and Features

## Design and Layout

- **Reception:** A seating area upon entry (with a member present) and clear, welcoming signage invited entry
- **Social ecosystem:** A mix of spaces (high/low activity and high/low socialization) offered members ability to retreat and engage when desired (Images 5,7, and 8)
- **Openness:** Ability to see what is happening in other spaces invited curiosity and promoted engagement
- **Purpose built spaces,** such as the kitchen, naturally invited solo and social interaction (Images 6 and 7)



Images 4 & 5. Dining Area and Meeting Room

## Accessibility and Inclusion

- **Open walkways and diverse table heights** supported diverse mobility needs
- **Seating in close proximity to essentials** (such as the restroom) and **seating options for standing activities** supported individuals with low endurance
- Spaces that felt **'off-limits'** because they were mostly used by staff, or had seating facing walls reduced engagement and interaction

## Greenspace

- Outdoor areas encouraged engagement as they provided **opportunity to connect with nature ('aina)** via sights, smells, and sounds. This included pavilions, gardens, and smoking areas.
- **Indoor spaces could also provide connection to nature** via indoor plants and soundscapes.



Image 8. Garden

"I go over here [pavilion] just to take a breath for a little while, get some fresh air, and then go back to my job."

"It's not as far of a walk to the restroom because I'm really disabled, so it's easy for me to get to the restroom. And that's why I sit there."

"Sometimes I feel like I'm with nature. You can either be in there [inside the Clubhouse], it's busy sometimes. You can be here and clear your mind, look at the beauty and everything." (Image 8)

## Aesthetics

- **A cozy, homelike atmosphere,** personalized with individual artwork on the walls created comfort and sense of place (Image 6)
- **Low clutter, high organization** encouraged utilization (Image 7)

"It's like a home away from home."



Image 6. Member Artwork

## Sensory Features

- **Sound:** Members appreciated a mix of quiet and active spaces, that made the Clubhouse "feel alive" but also calm
- **Sight:** Natural, warm, and sufficient lighting supported engagement
- **Smell:** Strong or noxious smells prevented space utilization
- **Temperature:** Temperature extremes prevented utilization
- **Tactile/touch:** Clean, comfortable surfaces, and soft furniture invited use

"When you walk in here it's just like BAM! in your face with the lighting. More friendly atmosphere... with maybe lamps. Light fixtures that are more welcoming and such."



Image 7. Kitchen

## Tools, Materials, and Food Options

- Tools for the work ordered day were inviting and used if they were **functional, clean, updated, and visually attractive.**
- **Food was a big motivator** for engaging together and coming to Clubhouse. (Image 7)
- Members appreciated **food affordability** and requested more **availability foods that matched their dietary needs** or preferences.

"But yes, the reason I like to be in the dining room: It's comfortable, the tables and the chairs, are nice and clean, they are in good condition."

# Design and Layout

**Reception: Clear signage and welcoming greetings**



**Unclear signage, non-institutional**



**Clear signage, non-institutional**



**Warm greetings at the door**

# Design and Layout

**Social ecosystem:** A mix of spaces (high/low activity and high/low socialization) offered members ability to retreat and engage when desired.



**High activity and socialization**



**“Quiet zone” to retreat**

*“You know, I want to be here, but I want to be not so close proximity wise to other people. I would like to just go and be myself and just relax.”*

# Design and Layout

**Openness:** Ability to see what is happening in other spaces invited curiosity and promoted diverse levels of engagement.



**Obscured Sight Lines**



**Clear Pathways and Openness**

# Design and Layout

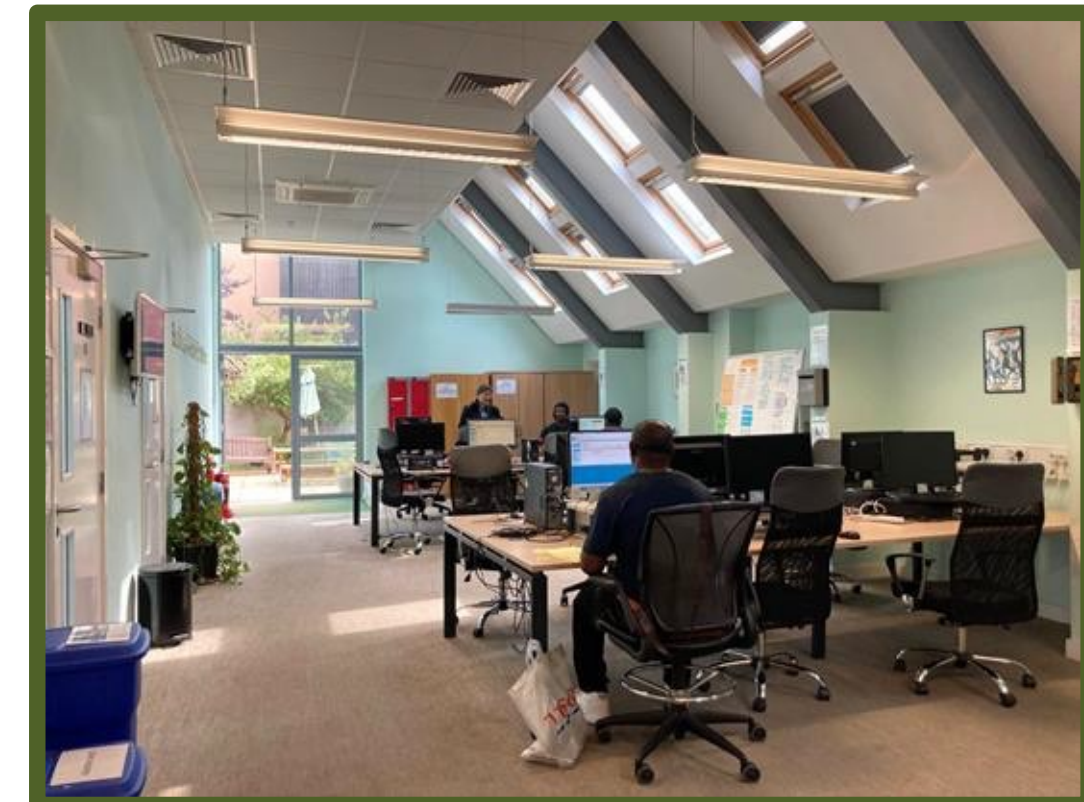
**Purpose built spaces**, such as the kitchen or computer zone, invited both solo and social interaction.



**Unclear Use**



**Kitchen area**



**Computer zone**

# Accessibility and Inclusion

Open walkways and diverse seating options and table heights supported diverse mobility needs while visual aids supported cognitive accessibility.



**Open pathways but no seating options or working surfaces**



**Wide walkways, multiple seating options, whiteboards and adjustable lighting**

# Accessibility and Inclusion

Spaces that felt "**off-limits**" because they were mostly used by staff or had seating facing walls reduced engagement and interaction.



**Wall facing desks**



**Center facing desks**

*"I don't like set up against the wall, because everybody's back is to you... you automatically don't feel like you should interrupt them."*



# Aesthetics

**A cozy, homelike atmosphere,** personalized with individual artwork on the walls created comfort, a sense of place and opportunities for placemaking.



*“It’s kind of like our living room, you can say.”*

# Aesthetics

**Low clutter, high organization encouraged utilization.**



**Highly organized tool area**



**Disorganized thrift store**

# Greenspaces

Greenspaces invited engagement in **nature-based occupations** in both rural and urban settings.



**Outdoor garden**



**Flower arranging**



# Sensory Features

**Sound:** Members appreciated a mix of quiet and active spaces, that made the Clubhouse "feel alive" but also calm.

*"It's quiet. It's nice and quiet in there... I feel safe and welcome."*

**Smell:** Strong or noxious smells prevented space utilization.

*"That's fumes or gasoline, and I don't like it one damn bit."*

**Temperature:** Temperature extremes prevented utilization.

**Sight:** Natural, warm, and sufficient lighting supported engagement.

# Tools, Materials, and Food

Tools and materials invited use and a sense of dignity when they were **functional, clean, updated, and visually attractive.**



**Kitchen**



**Library**



# Tools, Materials, and Food

Making and eating food together were a social centerpiece at Clubhouses, as it is in most settings. **Cultural fit, affordability and match to members' dietary needs** were priorities related to food.



# Next Steps: 1) Designing Environmental Interventions

1: Conduct observations to identify modifiable areas (pre)



2: Engage community in charette (participatory design process) to co-create environmental modifications



3: Implement environmental modification intervention



4: Conduct second round of observations (post)



# Next Steps: 2) Application to Diverse Settings

## Ethnographic rapid cycle reflection and action: A novel strategy for intervention co-design and implementation in occupational therapy

Joy Agner, PhD, OTR/L & Heldevam Pereira, OT, Mres

USC Chan Division of Occupational Science and Occupational Therapy, USA  
World Federation of Occupational Therapy Congress, Bangkok, Thailand, 2026

### Purpose

- **Community-based participatory research**, which involves community partners in all phases of the research process, is **rapidly growing in occupational therapy (OT)**.
- However, **methods for intervention co-design are underdeveloped in**

### Partners

- **USC Chan Health Equity Action Lab (HEALab)**: Dr. Agner's research lab with expertise in participatory methods, occupational therapy, and community mental health.
- **The Mark Twain (TMT)**: A transitional housing site in Los Angeles, CA, that provides intensive supports to individuals experiencing long-term homelessness.
- **Heart Forward LA (HFLA)**: A Los Angeles based nonprofit that aims "to transform the American mental health system through radical hospitality."

### Transitional Housing Intervention Visual Timeline

- The co-designed intervention utilized gardening, arts- and food-based activities to **enhance purpose, power sharing, destigmatization, and community building** among individuals in transitional housing.



### Relevance to Occupational Therapy Practice and Research

- ERCRA provides a structured framework for co-designing highly contextualized interventions with community partners.
- ERCRA can be utilized by practicing OTs or OT researchers.
- ERCRA can strengthen relationships between OTs or OT researchers and

Check out our poster!

*What social architecture features invite or inhibit occupational engagement and social interaction in your home culture and practice setting?*

*How are occupational therapists engaged in designing spaces of belonging?*

*Or how could we be?*

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