# Bridging the Gap Between Community, Academia, and Industry to Understand the Usefulness of an AI-Powered Dermatology Tool Among Everyday Users

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BACKGROUND

- There is an urgent need to engage diverse communities in the development of artificial intelligence (AI)-powered tools for healthcare.

- Stanford, Santa Clara Family Health Plan (SCFHP), and Google partnered to better understand the perceived usability of an AI-driven dermatology tool among community participants in East San Jose, CA.
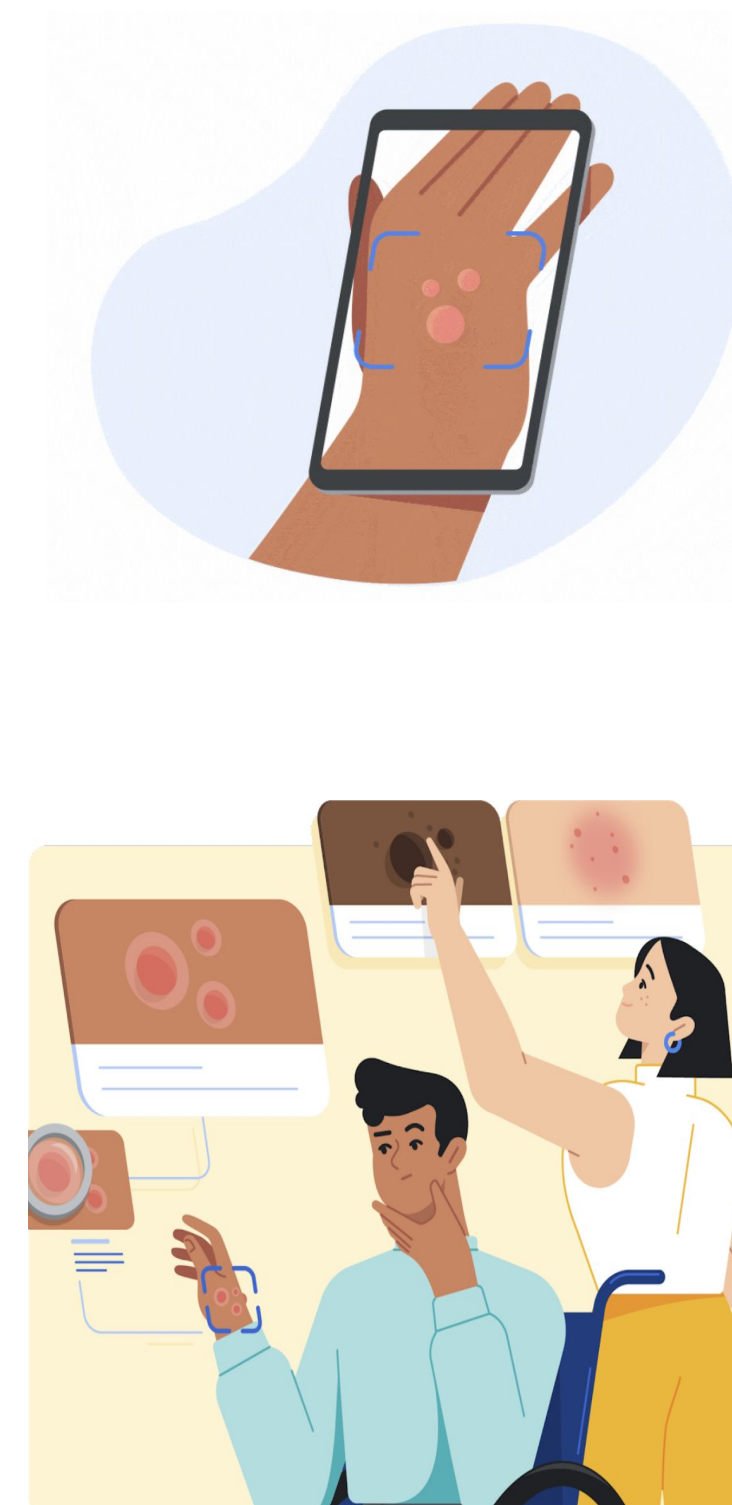
OBJECTIVES

- To determine the utility of the tool in an ethnically and age-diverse population.

- To obtain in-depth feedback from participants recruited during SCFHP Health Fairs (Oct. 2022 – Feb. 2023).

- To provide participants access to clinicians and identify follow-up services.
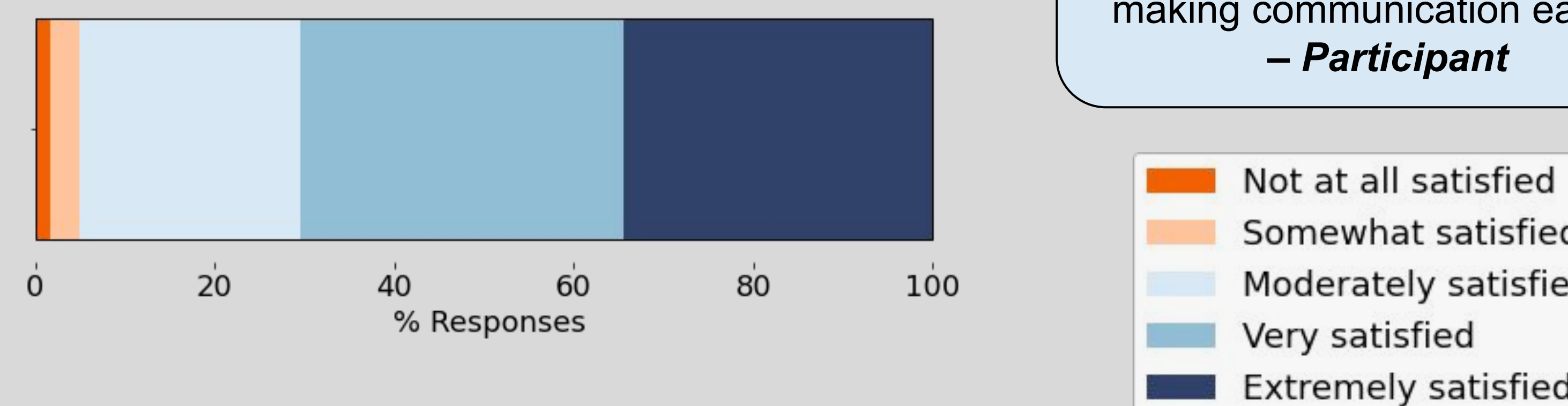
METHODS
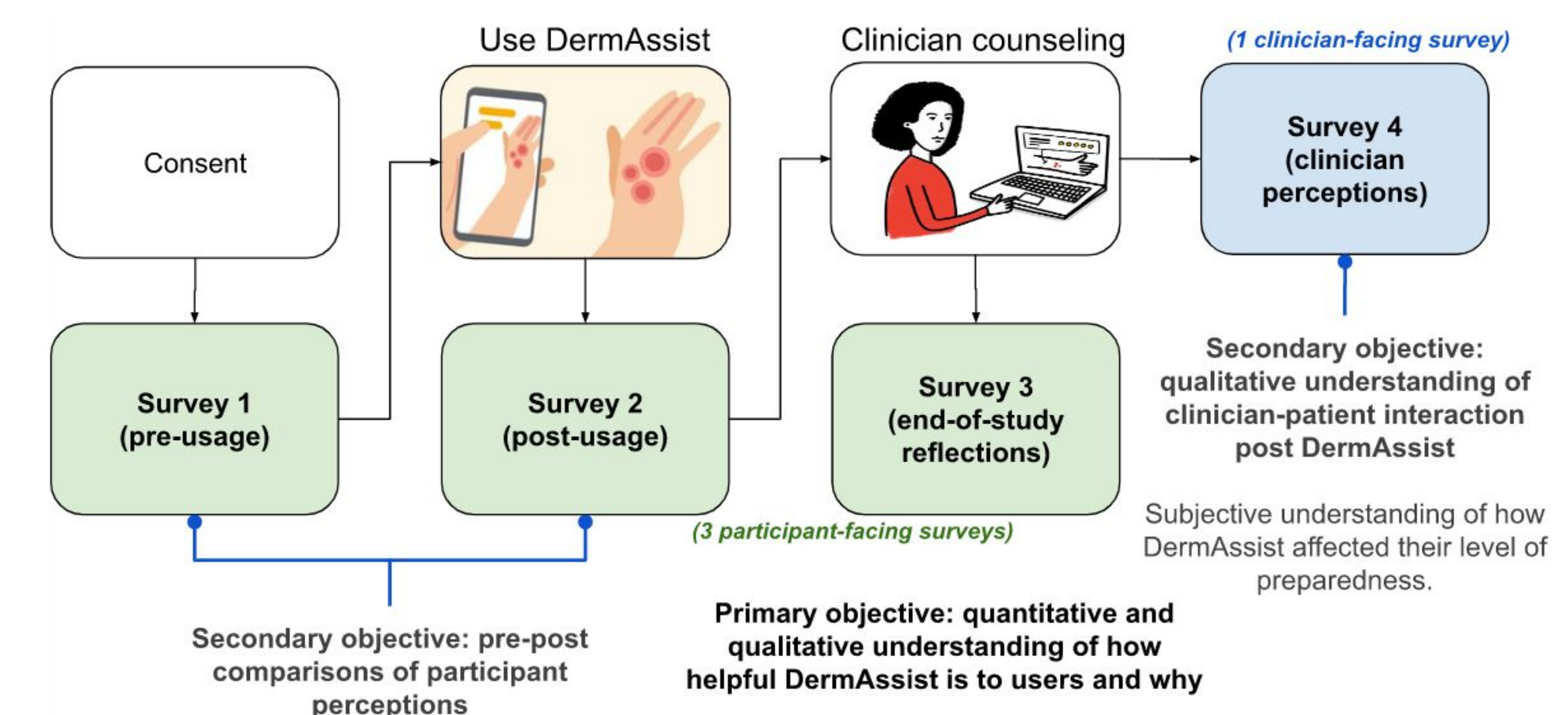
RESULTS

- Across 3 events, 75 participants used the app.

App Language	Count	%
Spanish	27	37
English	26	35
Vietnamese	16	21
Mandarin	6	8

- Participants expressed moderate satisfaction with the app, with 70% of respondents indicating they were very or extremely satisfied with the experience.

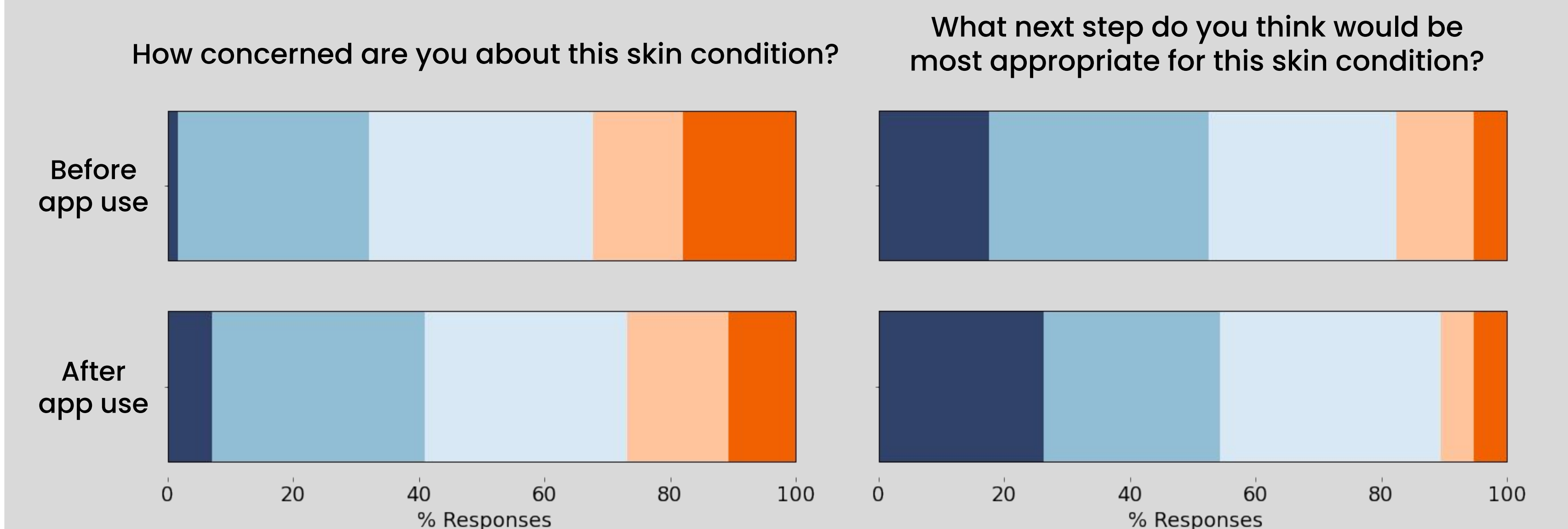How satisfied are you with the app you just used?

"I think it helps. Because I can show the doctor why I think it is a specific syndrome. Helps with making communication easier."
– Participant

Not at all satisfied
Somewhat satisfied
Moderately satisfied
Very satisfied
Extremely satisfied

- Clinicians expressed that app results were largely concordant with their own assessments in approximately 80% of evaluated cases.

"If the app is readily available, I would recommend that my patients use it. [...] I see this as beneficial in two broad groups: skin lesions and rashes."
– Clinician

- Overall distributions of level of concern and planned next steps did not significantly change after using the app.

How concerned are you about this skin condition?

What next step do you think would be most appropriate for this skin condition?

Not at all conerned
A bit concerned
Moderately concerned
Very concerned
Extremely concerned

Wait and watch
Self treatment
Non-urgent visit
Urgent visit
Same day visit

- The rate at which participants felt comfortable naming their condition increased significantly (p = 0.03), from 31% before app use to 46% after use.

Do you feel like you know what the name of the condition might be?

No
Yes
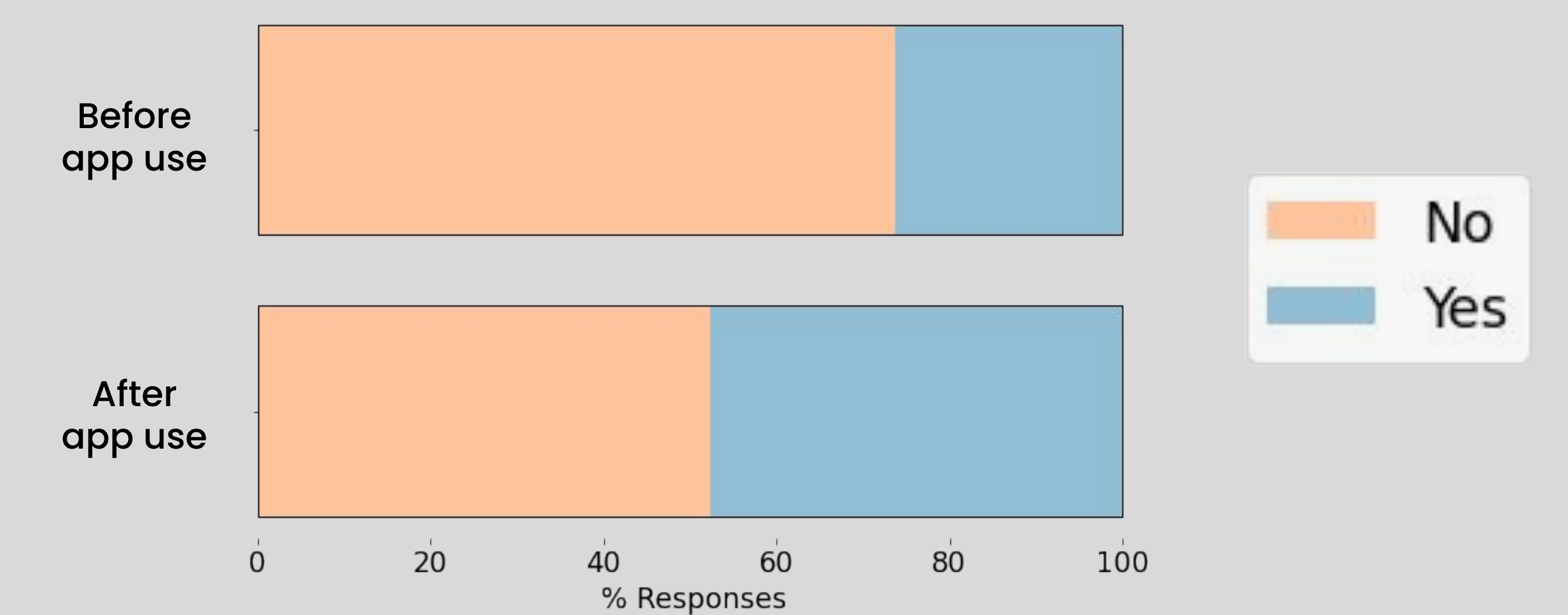
CONCLUSIONS

Our findings suggest that the tested AI tool can help users find relevant information about their skin health, enabling further research using targeted search terms. This project provides a model for bridging the gap between community, academia, and industry to co-develop technology that benefits all users.