Hi! I am Valeria,

A mixed methods researcher with 3+ years of experience designing and leading human-centered research at the intersection of academia and industry.

I studied psychology and have an MSc in Cognitive systems.
If you want to check more of my projects (data science) go to my Github!

My toolbox

I select my method based on stakeholder input, practical constraints (budget and timeline), and the specific research questions we aim to answer.

Interviews

A/B test

Survey design

Journey maps

Data analysis

Qualitative: In-depth interviews, diary studies, usability tests, thematic analysis and card sorting.
Quantitative: A/B testing, Surveying, data visualization.
Software: Python for data analysis, Qualtrics, Microsoft Office.

CASE 1: Cricket flour: Identifying best customer targets and advertisement effectiveness.

Project overview:

Two-stage research study examined consumer attitudes, preferences, and messaging effectiveness for cricket flour products across European markets. Through systematic analysis of 1,200 participants, we identified key demographic segments and optimal messaging strategies for alternative protein market penetration.

Problem: Identify best target consumers for cricket flour products and best ways to advertise them.
Method: Quantitative: Survey based, 1200 participants.
Outcome: Consumers who care about health and sustainability, and who are between 25 and 34 are the ideal target. The ideal way to target the product is through a message that appeals to sustainability values and a sense of shared social impact, which increases buying intention by 30%.

Stage 1: Consumer Profiling

Objective

To identify the profile of those interested in buying cricket flour.

Method - sample

Select a 200 sample from Prolific across all Europe from people 18 years old and onwards.

Research question: What are the consumer characteristics more strongly associated with wanting to try cricket flour?

Procedure: Survey based
Variables:

Demographics

What is your age group?

18–24
25–34
35–44
44-above

Willingness to try

How willing are you to try a food made with cricket flour?

1–5 scale: not at all to very willing

Food values

When choosing food, how important are the following?

Health
Price
Sustainability
Taste

Dietary Habits

Which best describes your diet?

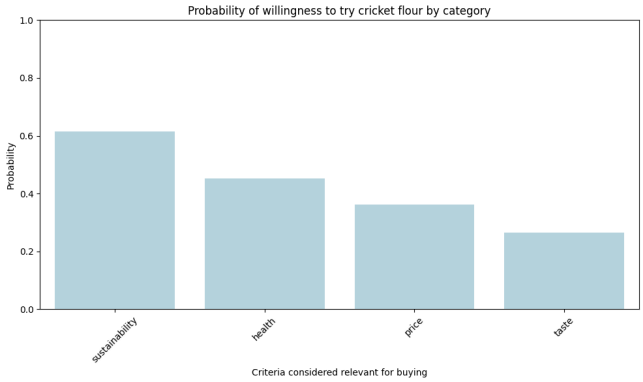
Omnivore
Vegetarian
Vegan
Carnivore

Attitudes toward Novel foods

How open are you to trying new or unfamiliar foods?
1–5 scale: not at all to very open

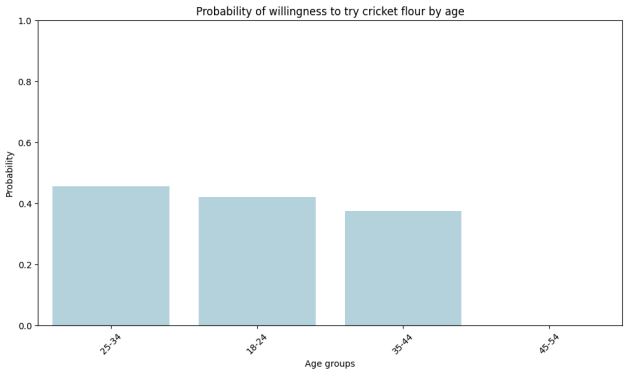
Have you ever tried insect based foods (e.g., cricket flour, protein bars)? (Yes/No/Not sure)

Results: Descriptive & inferential statistics



People between 25 and 34 report a higher intention to consume the product, compared to other age ranges.

Among respondents who considered sustainability the most important purchase criterion, **61% also reported high intentions to try cricket products**, from those that considered health to be most relevant 45% have high intentions of trying cricket flour, compared to only 26% and 36% on people who consider taste and price as most relevant.



Key conclusions :

1. Sustainability was the most important purchase criterion associated with interest in cricket products. 61% of those who reported having sustainability as a relevant criteria when buying also reported high interest in consuming the product.
2. Diet does not affect interest in the product.
3. People between 18 and 34 report more interest in cricket products compared to other age groups.

4. Having tried insect products is associated with higher intention to consume them in the future.

Stage 2: Messaging effectiveness

What keypoints do we already know?

A. Sustainability and willingness to consume insects normally go hand in hand.
B. Those people who had tried insects before are more likely to consume them.
C. People are generally disgusted by the idea of eating insects (there's a negative bias towards these products-except for some locations)

Objective

To identifying which advertising message that drives higher buying intention.

Method- sample

Experimental (A/B) test scenarios

1000 Prolific participants were exposed to one of four prompts available, or a control group describing the cricket.

Research questions:

1. What advertisement message drives higher interest in consumers?
2. Are there any relevant variables to pay attention when targeting the product, such as how frequently the person cooks or their age?
3. Are there any impacts on buying intention if the person has tried insect-based food in the past?

Messages presented to customers:

Control: *Cricket flour is made from finely ground crickets. It can be used in baking, cooking, or as an ingredient in protein bars and snacks.*

	Social norms	**Regular-no social related**
Sustainability	*Be part of the movement reducing food's footprint. Cricket flour saves land and water with every meal.*	*Every choice count: switch to cricket flour and cut your environmental impact without giving up nutrition.*
Health	*Upgrade your meals with the natural protein source athletes are turning to.*	*Fuel your body with clean, high-quality protein. Cricket flour makes every meal a performance boost.*

WHY SOCIAL- RELATED MESSAGES?
One of the strongest psychological drivers of action is what others are doing.

WHY HEALTH & SUSTAINABILITY?
These were the topics most strongly associated with costumers interested in the product.

Procedure: Survey+behavioral based

Variables:

Click

(Behavioral) Did people click in the "want to receive more information about this product" link (Yes/no)

Buying intention

How likely is that you buy the product?

1–5 scale: not at all to very much

Health conscious

From 1 to 5 how relevant is health-nutrition for you when deciding to buy a product?

Age

18–24
25–34
35–44
44-above

Cooking Frequency

How often do you cook at home?
0–7 days/week

Sustainability conscious

From 1 to 5 how relevant is sustainability for you when deciding to buy a product?

Gender

Male
Female
Non-binary

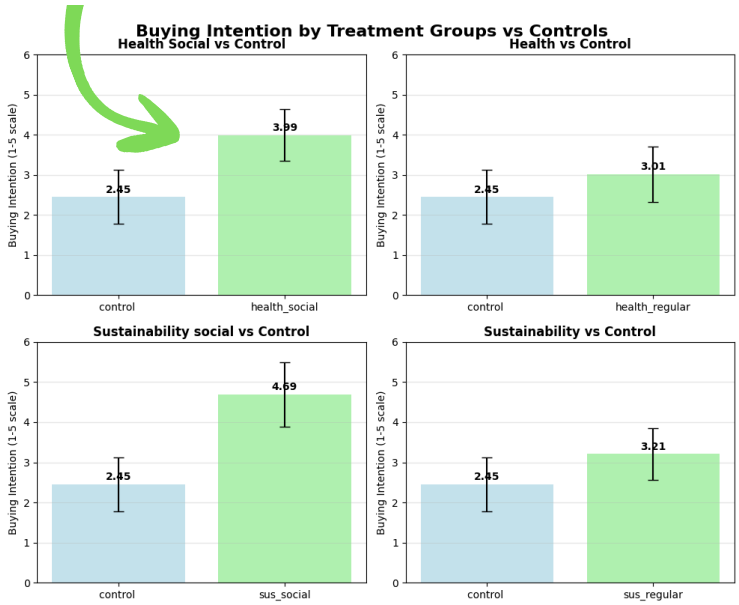
Location

Country of residence

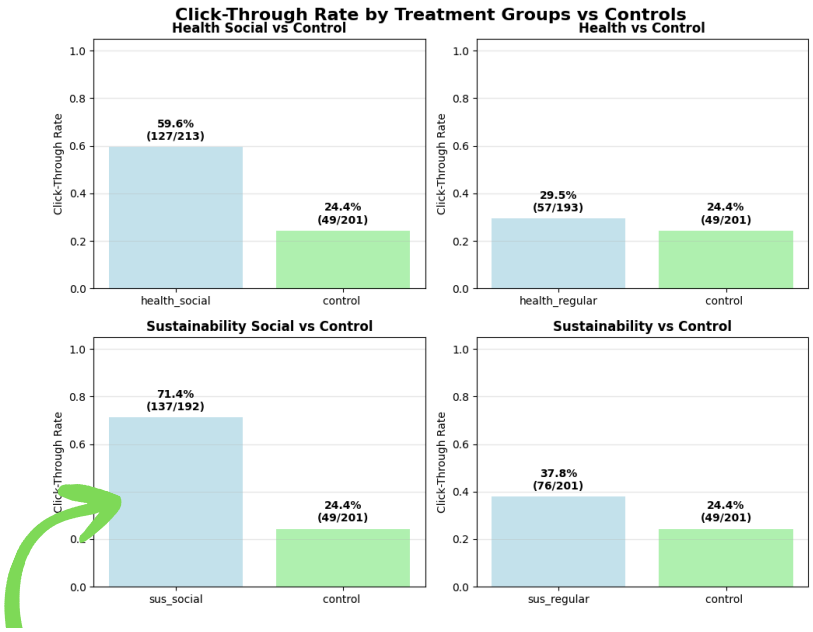
Prior Exposure

Have you eaten crickets or insect-based food before? (yes/no)

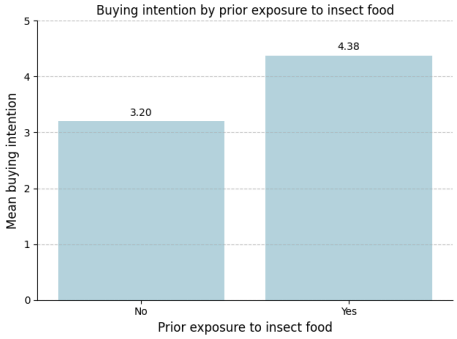
Results: Descriptive and Inferential Statistics

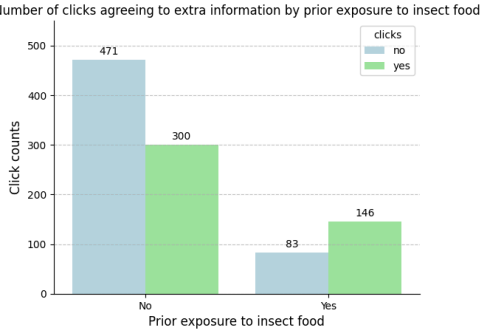


The graph shows that the prompt that drove **higher buying intention** was "Be part of the movement reducing food's footprint. Cricket flour saves land and water with every meal"

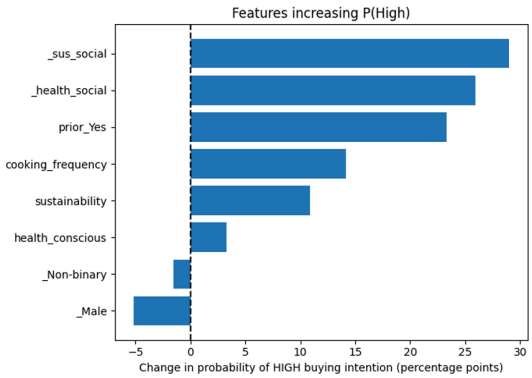


The graph shows that the prompt that drove **higher click rates (74%)** in the link to receive more information about the product was "Be part of the movement reducing food's footprint. Cricket flour saves land and water with every meal"





These graphs show that **people who have tried insect products in the past show more interest** in the product than those who haven't tried them.



The probability of being in the high buying intention rose from **69%** with the control prompt **to 98%** with the sustainability and social prompt.

This means prompting consumers with the message "Be part of the movement reducing food's footprint. Cricket flour saves land and water with every meal" makes it more likely for them to want to buy the product than any other message presented.

Conclusions:

Who to target

- Tends to cook at home
- Is aged 25-34
- Has tried insect products or is open to new food experiences.
- Cares about health and sustainability when making purchasing choices.

How to target:

- Advertising messages should include sustainability impacts.
- Advertising should include a sense of shared social movement.
- Promote free tastings of the product to customers in stores.

Strategic Impact:

- Defined a core target segment for campaigns.
- Evidence-based messaging strategy prioritized sustainability appeals.
- Impact: Informed ad spend allocation and retail strategy (e.g., in-store tastings).

CASE 2: Clinical Decision Support System: Identifying barriers for use and integration and opportunities for development.

Project overview:

RGS+ is a digital health app designed to support the rehabilitation of stroke patients, aimed to improve the patient's cognitive and motor functions through video games.

Problem: Eodyne was investing in the development of features that the clinicians were not using.
Method: Qualitative: Interview and Usability tests.
Results: The flow of the app and general graphic display of the the information was overwhelming and difficult to interpret in most cases.
Outcome: Recommendations directly informed product roadmap decisions, focusing development on features with the highest adoption potential and reducing wasted engineering investment.

USERS

Clinicians

Manage patient data through the medical information management system.

Patients

Complete daily goals on games prescribed by their clinicians, based on their condition.

PROBLEM STATEMENT:

The product head of the company reported that clinicians barely interacted with the app outside mandatory times, showing they were not integrating it into their practice, as it had been intended. As a consequence, they hadn't used the new added features, such as dashboards on clinical data and prognosis.

PROBLEM DEFINITION-HYPOTHESES:

As the problem was stated vaguely because the causes of poor integration had not been explored by the company we decided to make an initial approach ourselves and established some diagnostic hypotheses:

Hypothesis

cognitive load could be what is limiting the integration of the app into clinicians' practice

WHY?

There is a lack of prioritization in information and makes it difficult for users to identify what is relevant for patient intervention versus background monitoring.

Stage 1: Exploration

Main research question: Why are clinicians not using the app beyond the mandatory meetings with the patient?

- What do they use the app for?
- How does the app fit into existing clinical workflows?
- Are there any barriers when using the app?
- What tools or systems do clinicians prefer, and why?

Objective

To identify reasons why clinicians may not be using the app.

Method - sample

Interviews and usability tests
5 clinicians who were already using the app.

Interviews:

Question		Insight provided
Please tell me, when do you normally use the app, and what do you use it for?	→	How does the app integrate into their existing workflows?
What was your overall impression after using the app and dashboards?	→	Identify general perceptions and barriers of the app.
If this were a busy clinic day, what would you have paid attention to and ignored completely?	→	Identify what tools or systems they prefer and why.

Usability Test

Task- think aloud		Insight provided
Feel free to explore the app as you would do normally whenever you use it.	→	What do they use the app for?
Please select one patient and edit a prescription for them based on the information you have.	→	Assess the level of difficulty when reading the dashboards and generating new prescriptions. Longer time of reaction means more difficulty.

RESULTS FROM INTERVIEWS:

Use only in specific moments

> *"Mira, la verdad es que la uso principalmente cuando me llegan las notificaciones semanales" (...) Y después cuando tengo las consultas de seguimiento, ahí sí me meto a revisar cómo ha evolucionado y si necesito hacer ajustes para el paciente".*

General positive perception of the app, value longitudinal information.

> *"La app me parece súper buena, la verdad. Lo que más me gusta es poder ver toda esa información longitudinal sobre cómo va progresando el paciente a lo largo del tiempo en el mismo lugar."*

The **most relevant information they seek:**

- How have patients been feeling
- How have patients been performing in the tasks prescribed.

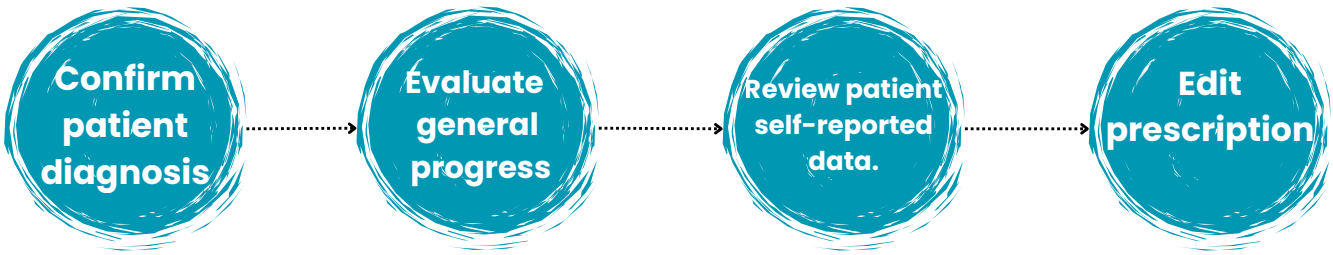
Less relevant:

- Specific measures of progression, unless there are signs that suggest them they should.

> *"En un día así de loco, lo que sí o sí revisaría es si están haciendo los ejercicios, cómo se han estado sintiendo, qué tal les fue en las tareas que les prescribí y el pronóstico que da la app. Ah, y los juegos que jugaron la semana pasada para no repetir lo mismo. Pero toda esa información detallada de memoria y funciones ejecutivas... solo la miraría si veo algo raro en el rendimiento general del paciente"*

RESULTS FROM USABILITY TESTS:

Clinicians use the app to:



Task completion:

Success rate: 100% They know how to edit prescriptions.
Average completion time: Between 5 and 7 minutes.
Ideal time around 3 minutes. This indicates workflow complexity.

Key conclusions :

1. **Information overload:** Dashboards displayed too much data without prioritization, leading to high cognitive load.
2. **Workflow mismatch**: Clinicians primarily wanted quick overviews (progress, wellbeing, adherence) but struggled to locate this information efficiently.

3. **Adoption trigger**: Clinicians only used the app when prompted by notifications or during patient checkups, suggesting the app wasn't naturally embedded in practice.

STAGE 2:

Objective:

Define a hierarchy of the most relevant information for clinicians when accessing the app.

Method:

Survey based (10 questions)
50 Clinicians
Statistical analysis

Example questions:

From the medical patient data, which information do you consider the most relevant?
Please select 3

A. App starting date
B. Date of stroke
C. if the version of the patient is AI supported
D. patient id
E. Type of stroke
F. Stroke location
G. Stroke side

When evaluating the patient's data, which degree of granularity would you like to have access to?

Likert scale (from 1 to 5)

I want to know the daily rates → I want to know the weekly rates

Results:

1. As suggested by the exploratory study, clinicians do prioritize certain metrics over others in the app, instead of looking at everything.
2. We identified 1 or 2 key metrics in each dashboard to guide future design.

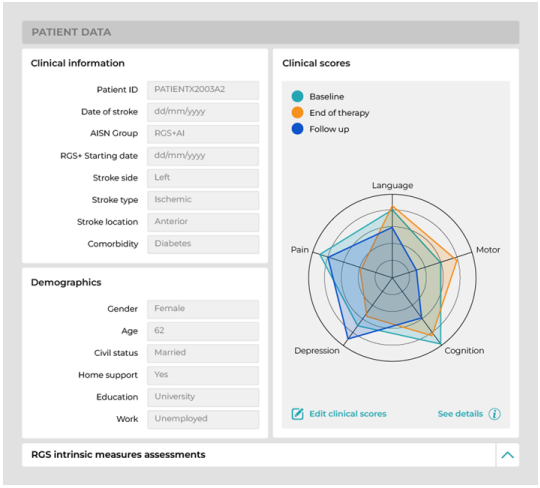
Conclusions:

1. **Information overload:** Dashboards displayed too much data without prioritization, creating **high cognitive load** for clinicians.
2. **Workflow mismatch:** Clinicians wanted **quick overviews** (progress, wellbeing, adherence), but the app made it difficult to locate this information.
3. Clinicians **prioritized only 1–2 key metrics** per dashboard, not all available data.

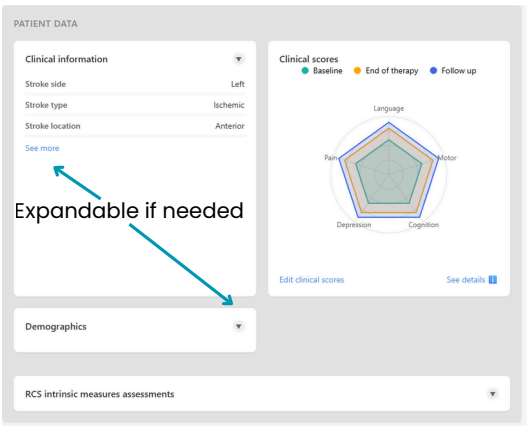
Recommendations and design considerations:

1. Reduce noise in the flow and restructure information architecture to follow the natural diagnosis that clinicians were intending to follow.
2. Less is more: avoid adding extra information irrelevant to clinicians.
3. Allow clinicians to expand if needed instead of showing all the information.

ORIGINAL

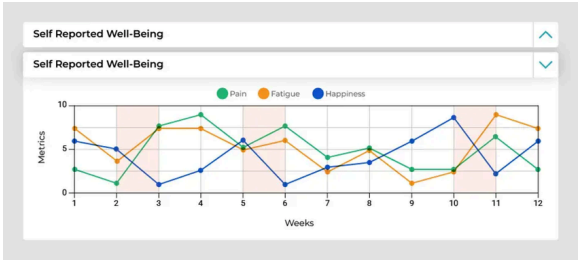


NEW PROTOTYPE



Achievements:

- Reduced noise
- The flow allows agency on the side of clinicians.
- Only relevant information is displayed.
- Reduces cognitive load.



Dynamic vs static dashboard

Strategic Impact:

• Recommended redesign of information architecture and dashboards.
• Simplified interface reduced cognitive load and aligned with diagnostic workflows.
• Impact: Directly informed product roadmap, prioritizing features with higher adoption potential.