SHIFTING DIETS, SHIFTING MINDSETS

Research on strategies and pathways towards more plant-rich diets

MAPP CENTRE – RESEARCH ON VALUE CREATION
IN THE FOOD SECTOR
DEPARTMENT OF MANAGEMENT
AARHUS UNIVERSITY

2026

JESSICA ASCHEMANN-WITZEL
PROF. DR. HABIL.

AGENDA

Main **messages** on consumers

Research examples:

1) Understanding different **segments**
2) Challenging **households**



Image: Colourbox

PROJECT PLANTPRO

- ✓ **8.4 mill DKK investment by IFD**
- ✓ **April 2021- December 2024**
- ✓ **19 partners:**
  MAPP Centre /Aarhus University, Food Science / University of Copenhagen, Copenhagen Business School, Plantebranchen, Dansk Vegetarisk Forening, Simple Feast, Beyond Coffee, Thinktank OneThird, Circular Food Technology, Møllerup Brands, Food Innovation House, Orkla, Naturli, Planteslagterne, Upfield, Eachthing, Rema1000, Fair Trees and Nemlig.com



https://mgmt.au.dk/plantpro/

MESSAGES

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MESSAGE 1

Behaviour change is both under- and over-estimated.

A) It is under-estimated when people say ‘behaviour change is slow / difficult’ and use current behaviour and demand prognosis to argue for what will happen.

B) It is over-estimated when mainly more information and nudging is called for, focusing on ‘informed / rational choice’, but the structure is is not addressed enough.

MESSAGE 2

Behaviour change needs that several factors ‘come together’ to happen.

This is because all citizens and consumers differ from each other – upscaling behaviour change needs different factors for different people.

In addition, few behaviour change occurs because just one factor has changed. It is a combination of drivers in most cases.



SEGMENTS

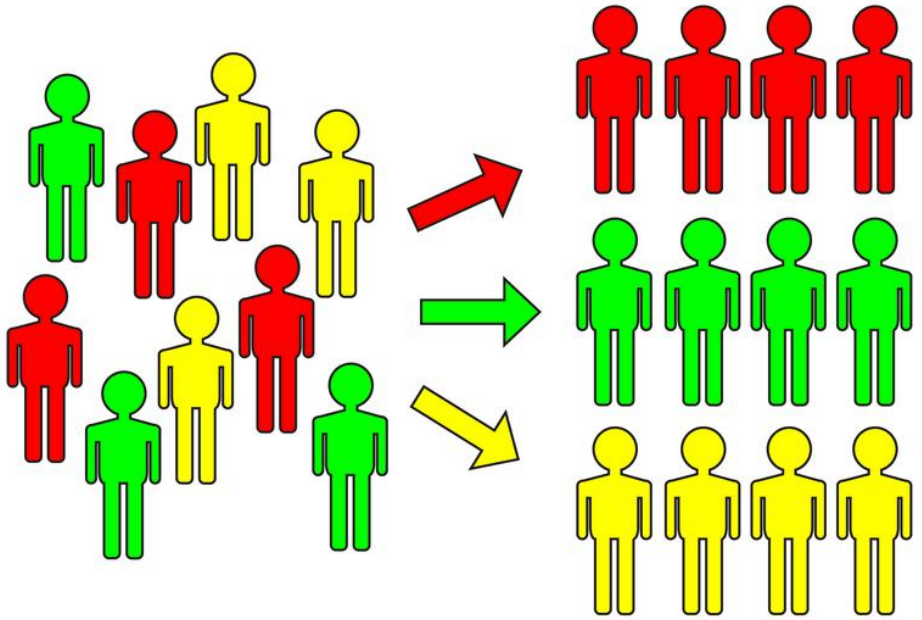
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METHOD SEGMENTATION STUDY

Online survey of 1200 Danish respondents – representative in age, gender and region

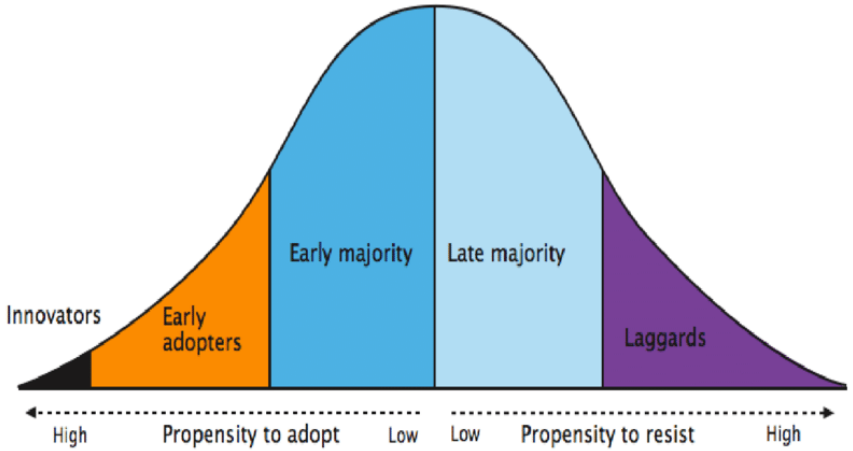
Cluster analysis

1. Clustering based on psychographic variables
2. Cluster characterization using sociodemographic variables
3. Naming of segments to carve out differences for discussion



THEORY SEGMENTATION STUDY

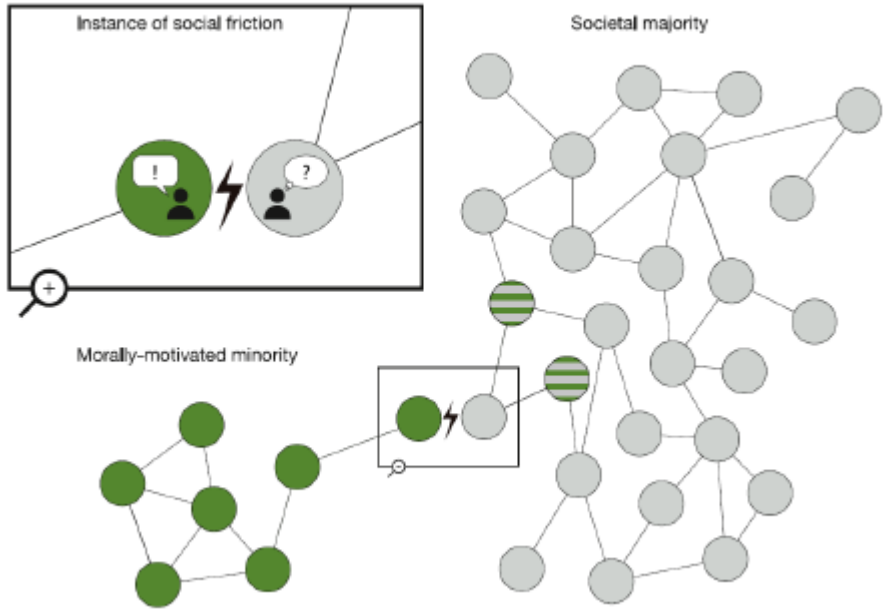
1. **Theory of Innovation adoption:** People differ in how early they approve of and adopt new ideas – also behaviours

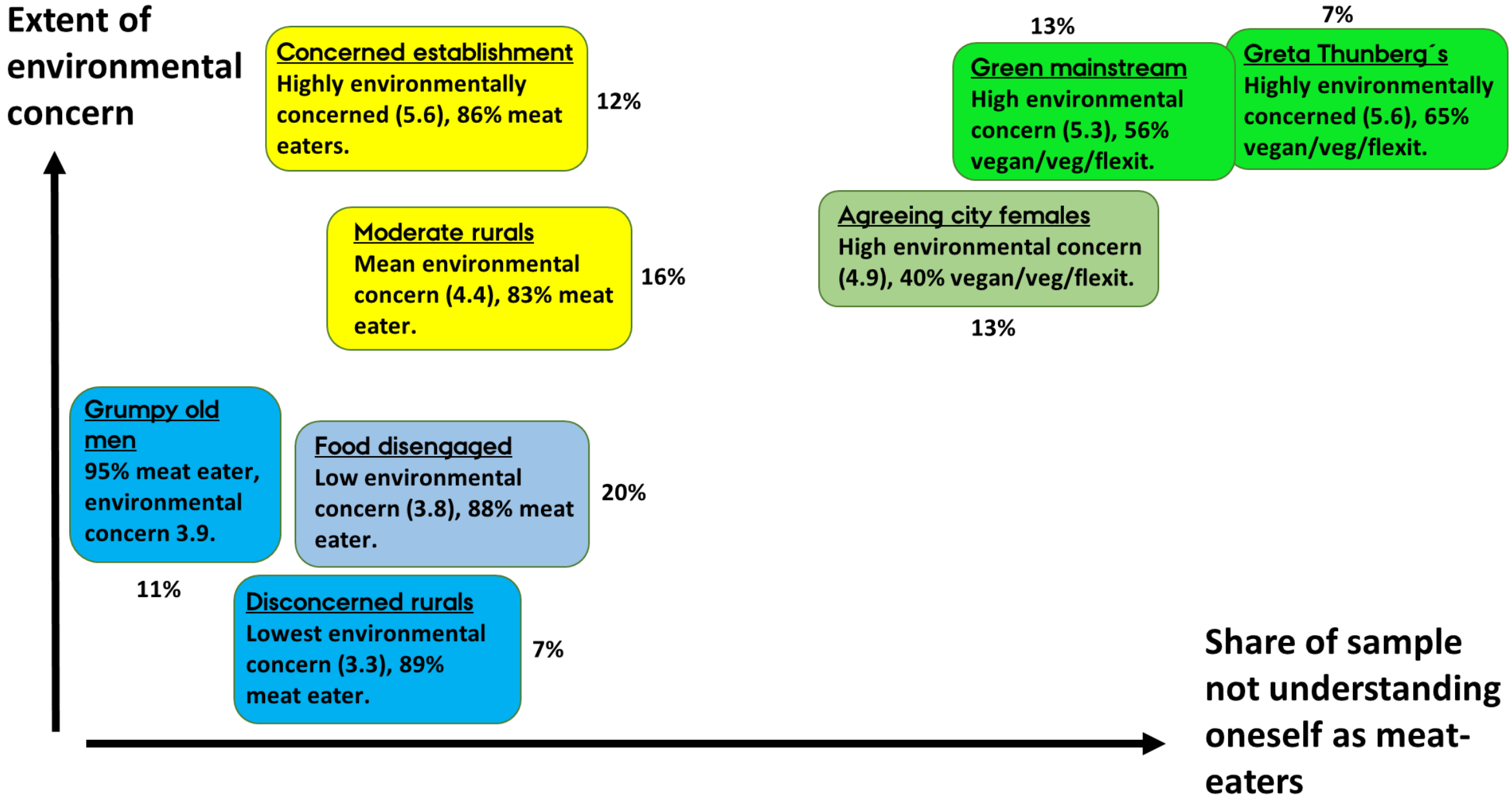


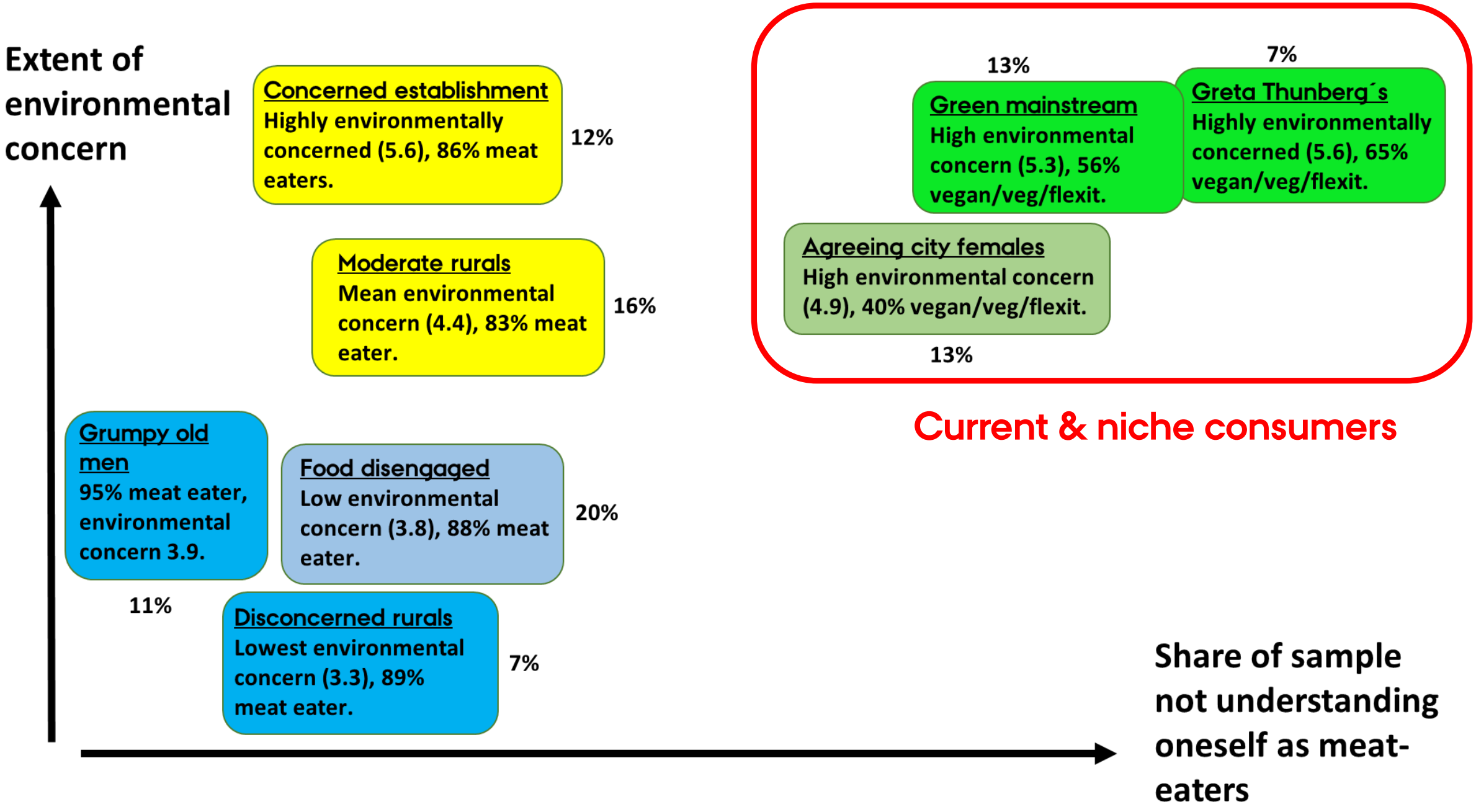
THEORY SEGMENTATION STUDY

1. **Theory of Innovation adoption:** People differ in how early they approve of and adopt new ideas – also behaviours

2. **Social tipping points:** Small group changes majority – change spreads between different social groups, non-linear change is triggered and up-scaling achieved – the new behaviour is easier for all




Extent of environmental concern
Concerned establishment
Highly environmentally concerned (5.6), 86% meat eaters.
12%
Moderate rurals
Mean environmental concern (4.4), 83% meat eater.
16%
Grumpy old men
95% meat eater, environmental concern 3.9.
11%
Food disengaged
Low environmental concern (3.8), 88% meat eater.
20%
Disconcerned rurals
Lowest environmental concern (3.3), 89% meat eater.
7%
13%
Green mainstream
High environmental concern (5.3), 56% vegan/veg/flexit.
7%
Greta Thunberg´s
Highly environmentally concerned (5.6), 65% vegan/veg/flexit.
Agreeing city females
High environmental concern (4.9), 40% vegan/veg/flexit.
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Share of sample not understanding oneself as meat-eaters


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Current & niche consumers
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GREEN SEGMENTS

Intensify range and frequency and further normalize / habitualise plant-based eating.

Price and unit promotions, loyalty programs and meal boxes, appealing to norms and health motives.

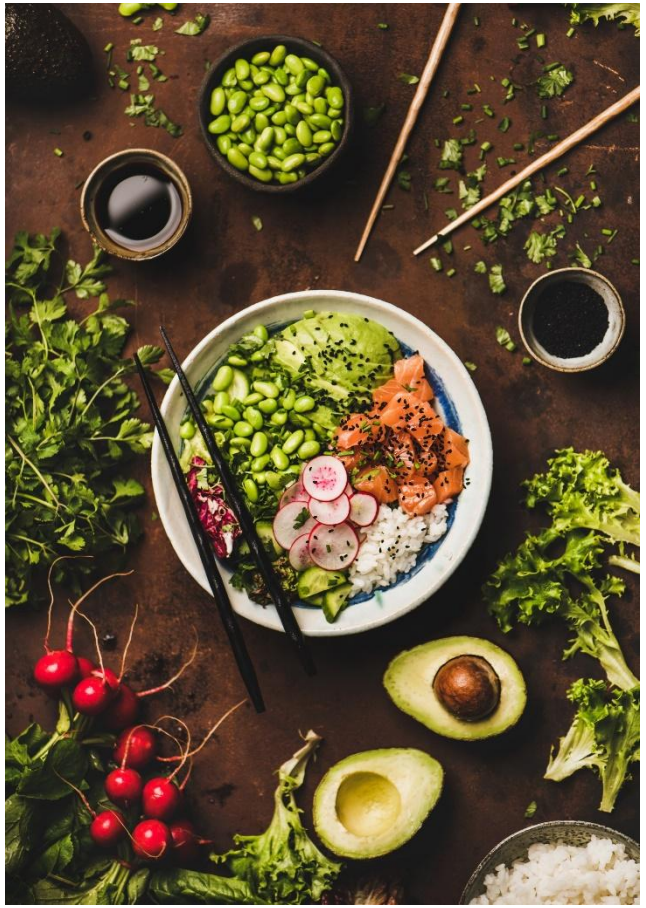
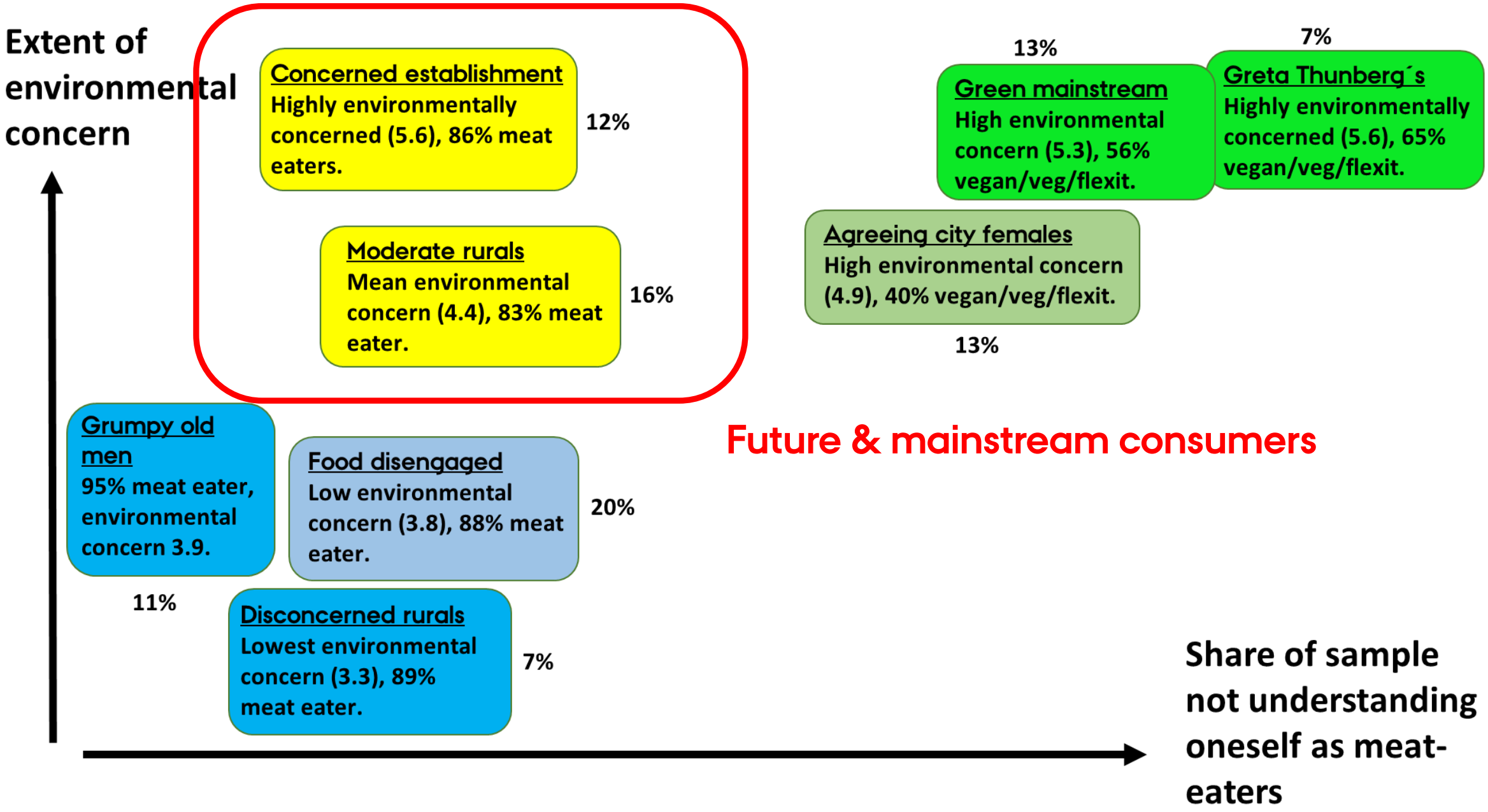


Image: colourbox


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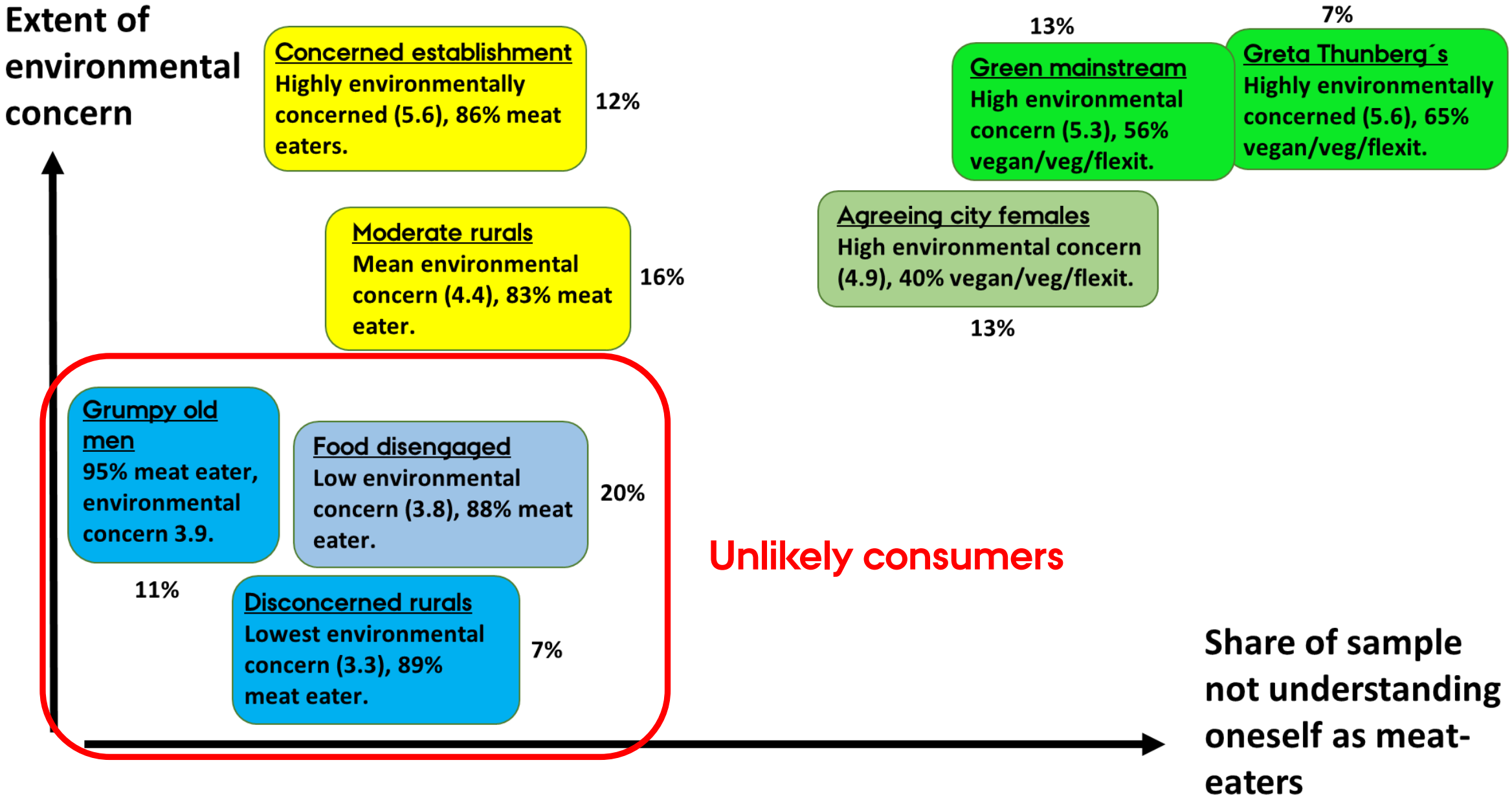
YELLOW SEGMENTS

Translate concern into action and connect to others.

Communication underlining environmental / climate effect of dietary change, showing how like-minded peers have already changed, traditional recipes but with plant-based products.



Image: colourbox


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BLUE SEGMENTS

Change context and nudge.

Change canteen meal composition, tasty alternatives at same price, choice architecture to increase attention / availability with little effort.



Image: colourbox



HOUSEHOLDS

Image: Colourbox

METHOD HOUSEHOLD STUDY

Skanderborg Municipality

120 households – recruited to be motivated but not yet conducting the behaviour

‘Challenging’ households to eat plant-rich for 4 weeks

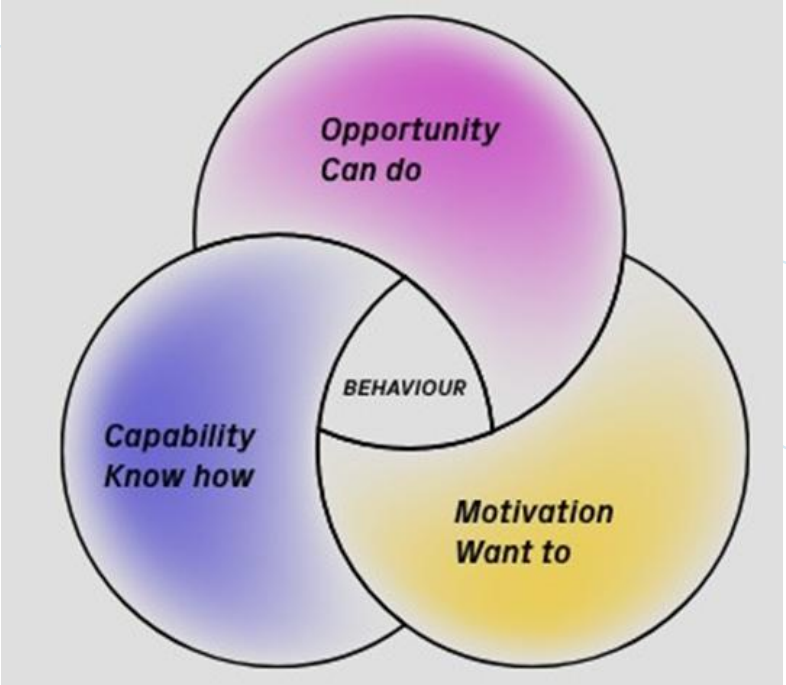
Mirroring initiatives like ‘Veganuary’ or ‘Green January’

Question: How does perception, attitude and behaviour change while eating more plant-rich?



THEORY HOUSEHOLD STUDY

1. **COM-B model:** We recruit **Motivated** consumers and support their **Capability** and **Opportunity** => **Behaviour**

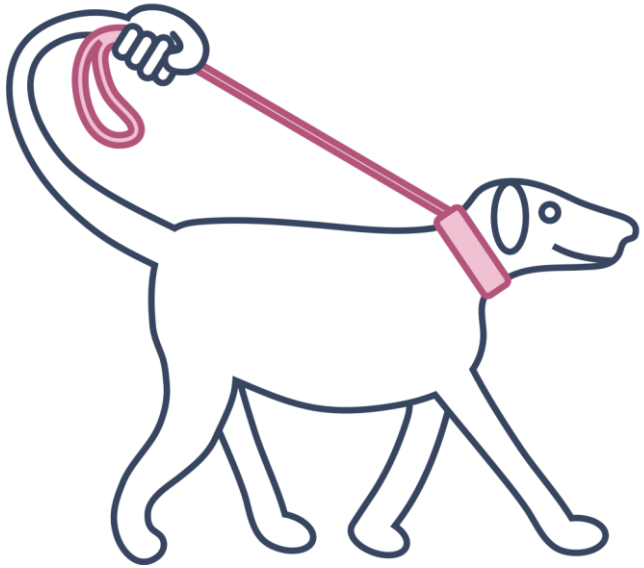


https://theresearchagency.com/mainframe/human-behaviour/com-b-model - COMB /(MOAB) model visualisation

THEORY HOUSEHOLD STUDY

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2. **Self-nudging:** Once households are signed up, they are more likely to go ahead – they have nudged themselves to move from intention to behaviour



https://www.scienceofboosting.org/self-nudging/ visualisation

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3. **Self-determination theory:** Positive 'mastery experiences' further increase motivation to proceed / establish the new behaviour – an upward spiral

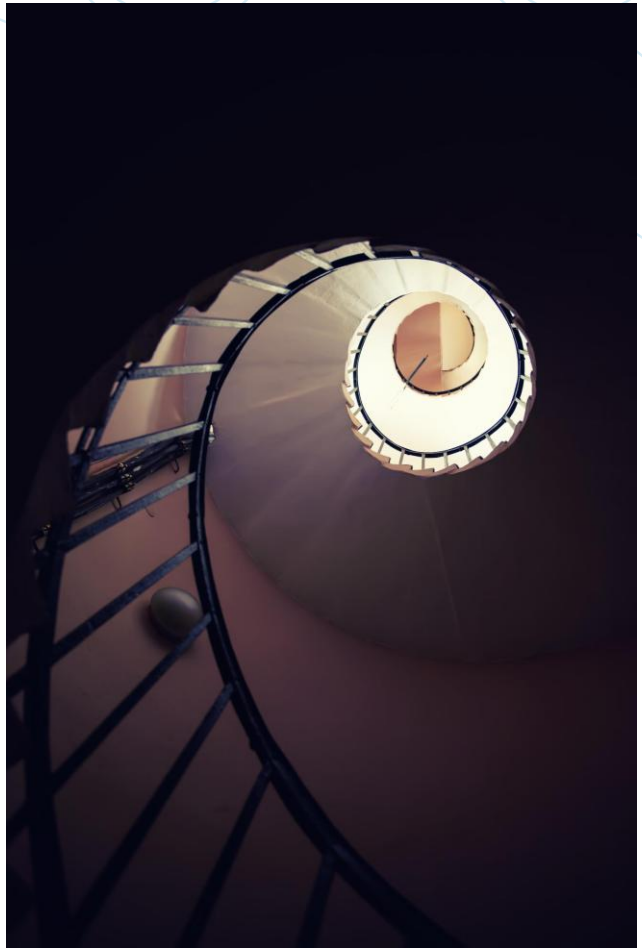


Image: colourbox

PLANTPRO CHALLENGE METHOD

N=62

1

Pre-intervention

Nov-Dec 2021

2

Plant-based sample boxes & inspiration material

2a



2b

Survey on products

mid Jan - mid Feb 2022

3

During-intervention

Feb 2022

4

Post-intervention

April - May 2022

5



Mai- June 2022
Interviews
N=13

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PLANTPRO CHALLENGE RESULTS

1) Participants eat significantly less meat / more plant-rich also 2 months after the challenge



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2) Participants significantly changed beliefs about their capabilities and availability of plant-based products





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1) Participants eat significantly less meat / more plant-rich also 2 months after the challenge

2) Participants significantly changed beliefs about their capabilities and availability of plant-based products

3) A positive change in perceived capability explains reduction in meat consumption







CONCLUSION

The two research examples exemplify that

a) people *differ* from each other,
b) behaviour change needs *various* factors, and
c) behaviour change is *possible* and can occur *faster* and be more widespread than thought – *if* enough and the right driving factors are in place.





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