Blue-green consumption

Determinants for eco-labelled seafood purchasing in Sweden

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Quality Approved
SCOTTISH SALMON
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GLOBALG.A.P.
FRIEND OF THE SEA
BEST AQUACULTURE PRACTICES CERTIFIED
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Debio
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BIOSUISSE
CERTIFIED SUSTAINABLE SEAFOOD
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AquaGAP
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Naturland

Research questions & aims

1. Level of consumer knowledge?

2. Relative importance of internal factors?

3. Identification of barriers and drivers for increased demand

Why Sweden and Stockholm as a case?

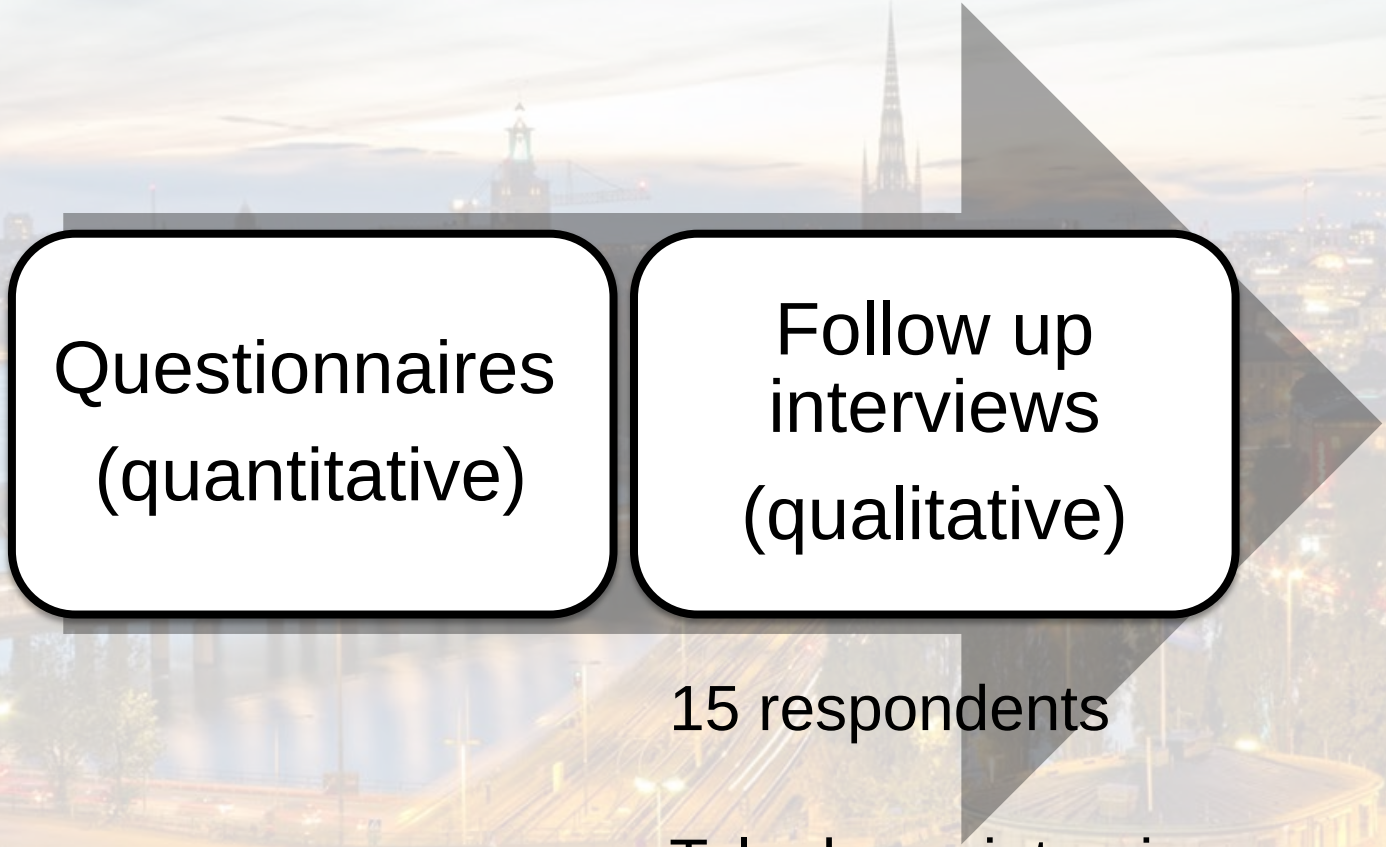
- Highly environmentally conscious consumers
- Potential knowledge gaps and barriers likely globally relevant


Methodological approach

Distributed in Stockholm, Sweden in October-December 2013

500 surveys distributed and 371 fully completed

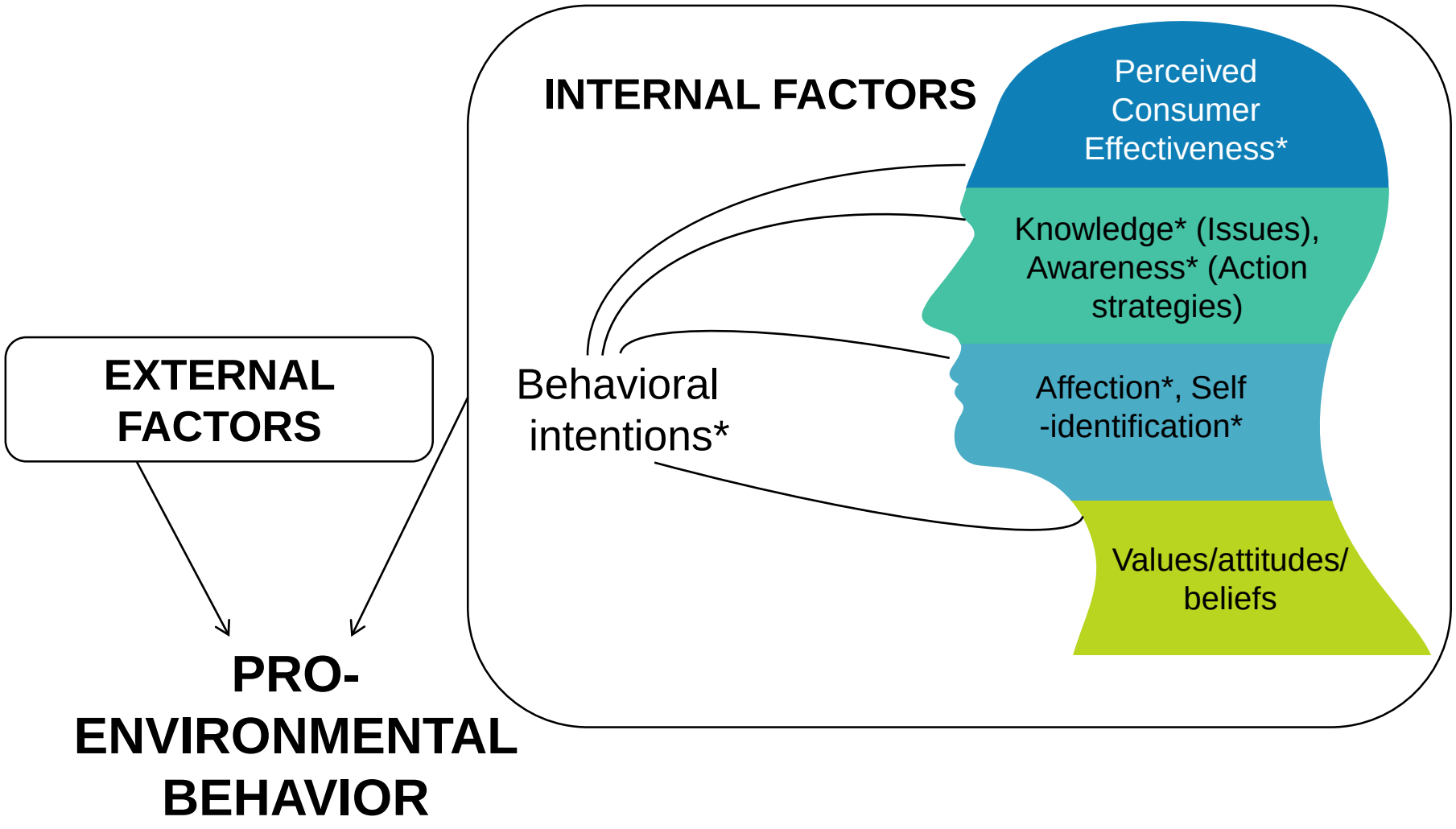
Methodological approach



15 respondents

Telephone interviews

Theoretical framework



Model adapted from Kollmuss and Agyeman (2002)

Operationalizing explanatory variables

Knowledge

Awareness (Action strategies)

Subjective Environmental Knowledge

Pro-environmental identity

Operationalizing explanatory variables

Perceived Consumer Effectiveness (PCE)

Concern

Sense of responsibility

1. Level of consumer knowledge?

Consumer knowledge on production methods and environmental impacts

- Correct response rate between 52% and 73%

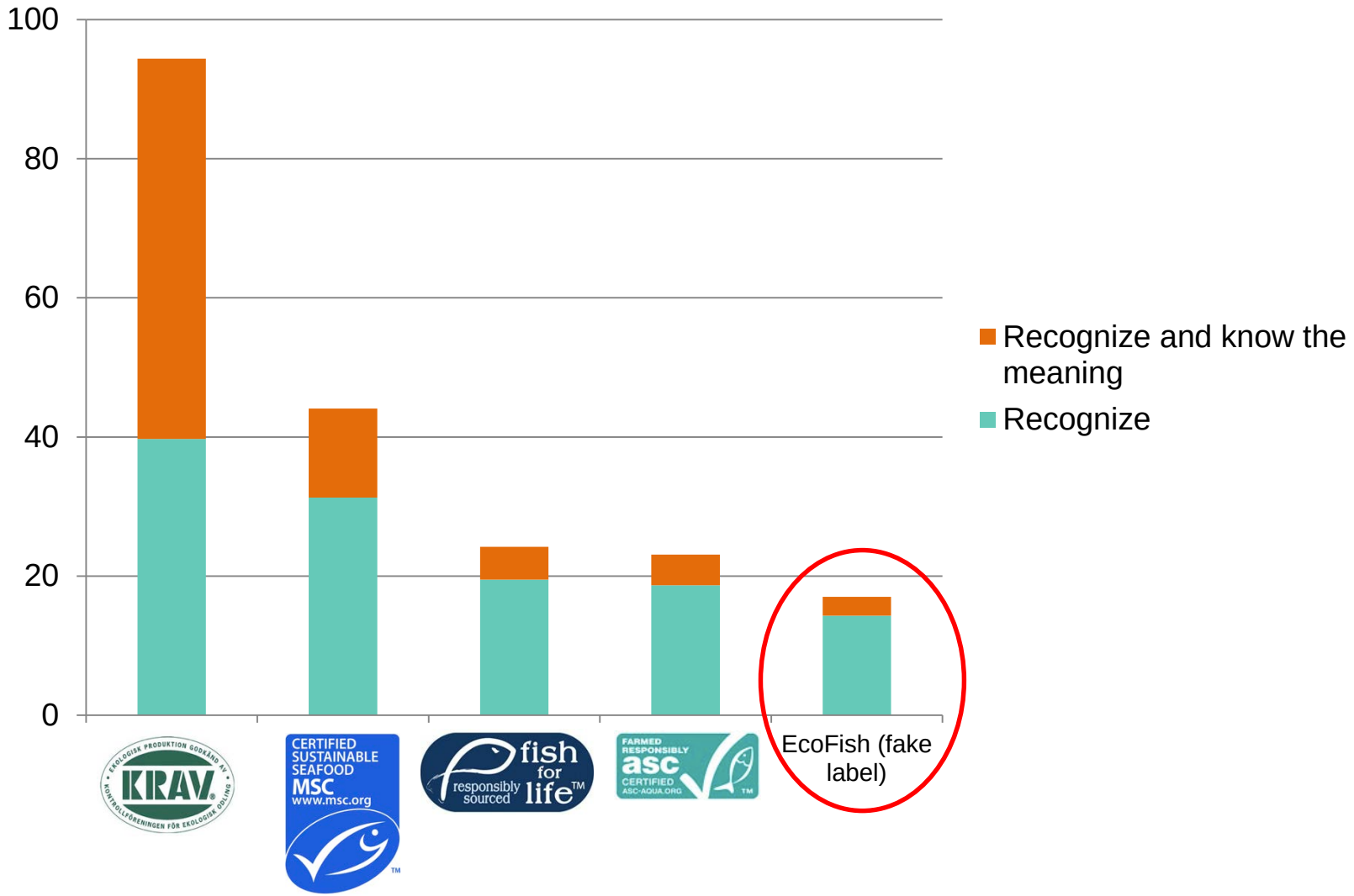
Salmon consumed in Sweden is most often farmed in:

a) Ponds on land

b) Net pens in the ocean **60% correct**

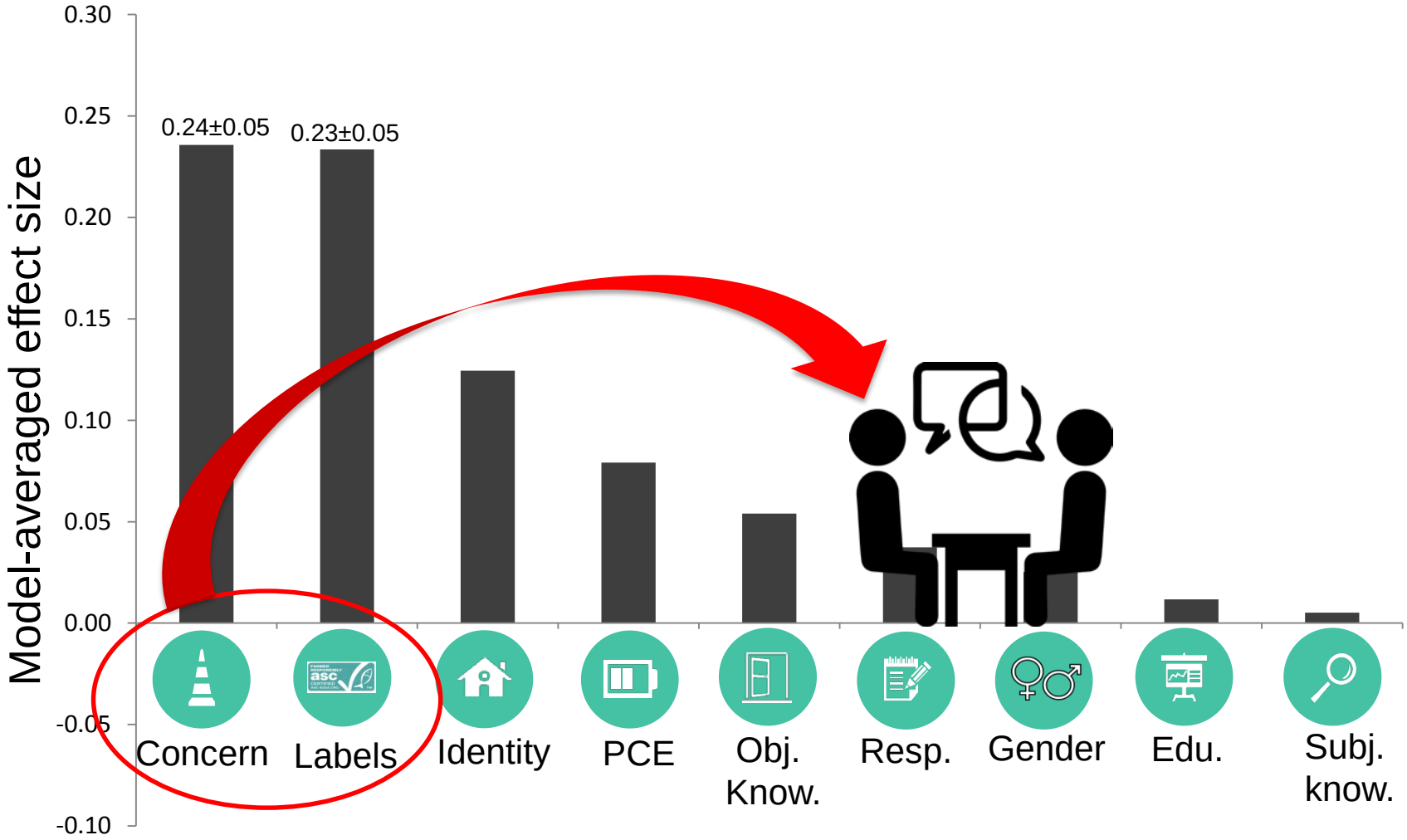
c) Indoor ponds

Recognition of seafood eco-labels



2. Importance of personal characteristics?

Multimodel averaged effect sizes



3. Identification of barriers

Unpacking concern

…it doesn't feel natural, it's kind of something they do just to make money. (Female 58 years)

CONCERN →
PRO-ENVIRONMENTAL CONSUMPTION?

No, actually not at all… I don't even think of it as fish… I just think that okay, here is a package of cod. (Male 22 years)

(i) limited knowledge of how seafood is produced

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(ii) lack of affective narratives bridging knowledge and concern

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(iii) lack of familiarity with seafood eco-labels

Unpacking label awareness

I don´t know whether it exists? I´m aware about red listing, *but I've never seen any signs* [of eco-labelled seafood]*, no, it has never reached me.* (Male 46 years)

(i) limited knowledge of how seafood is produced

(ii) lack of affective narratives bridging knowledge and concern

(iii) lack of familiarity with seafood eco-labels

(iv) mismatch motives eco-labelled food and eco-labelled seafood criteria


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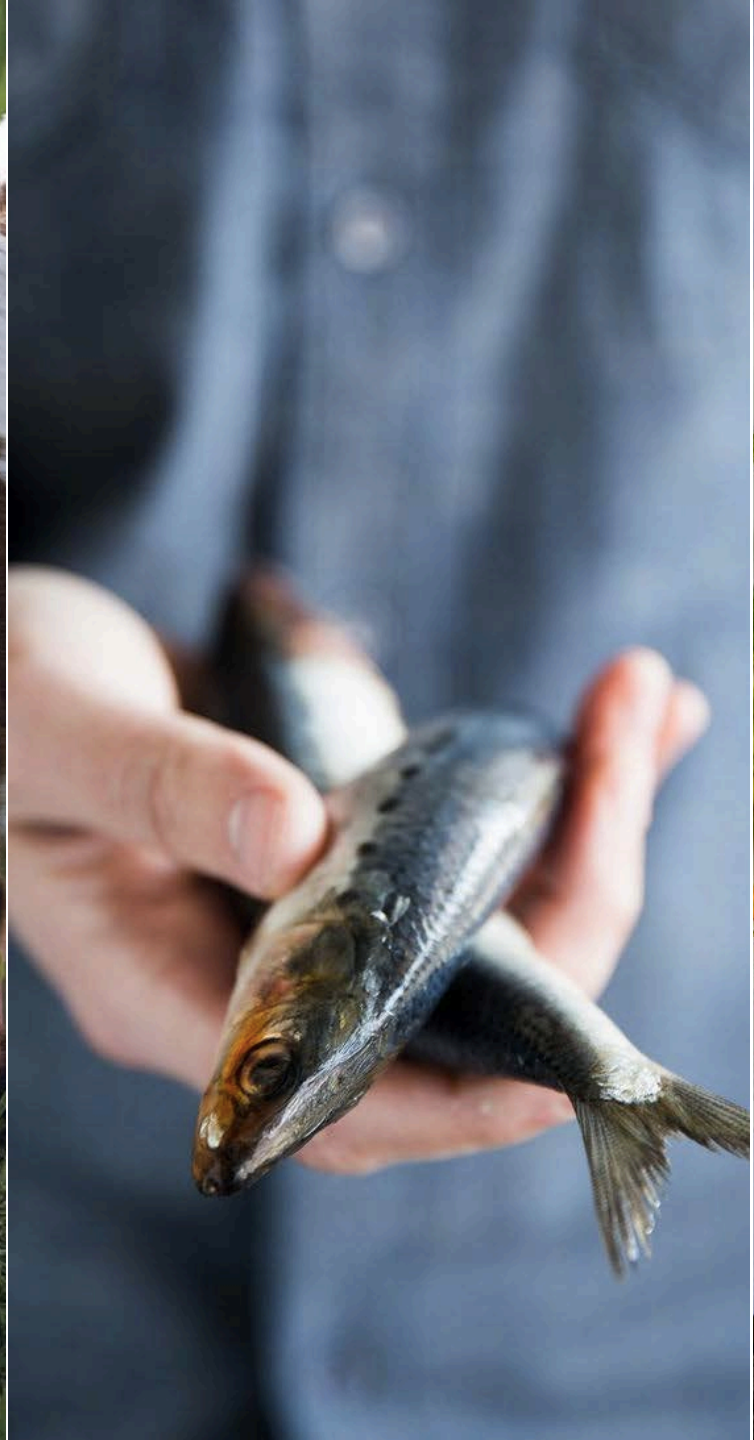


(i) limited knowledge of how seafood is produced

(ii) lack of affective narratives bridging knowledge and concern

(iii) lack of familiarity with seafood eco-labels

(iv) mismatch motives eco-labelled food and eco-labelled seafood criteria

(v) animal welfare less of a concern for seafood in comparison to other livestock

Conclusions

- Limited consumer knowledge → Room for improvement
- Key to stimulate emotional engagement for seafood and marine ecosystems
- Demand will likely be limited → Other governance mechanisms highly important

Thank you!

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Sida (the Swedish Research Council (proj. no. SWE-2011-38)

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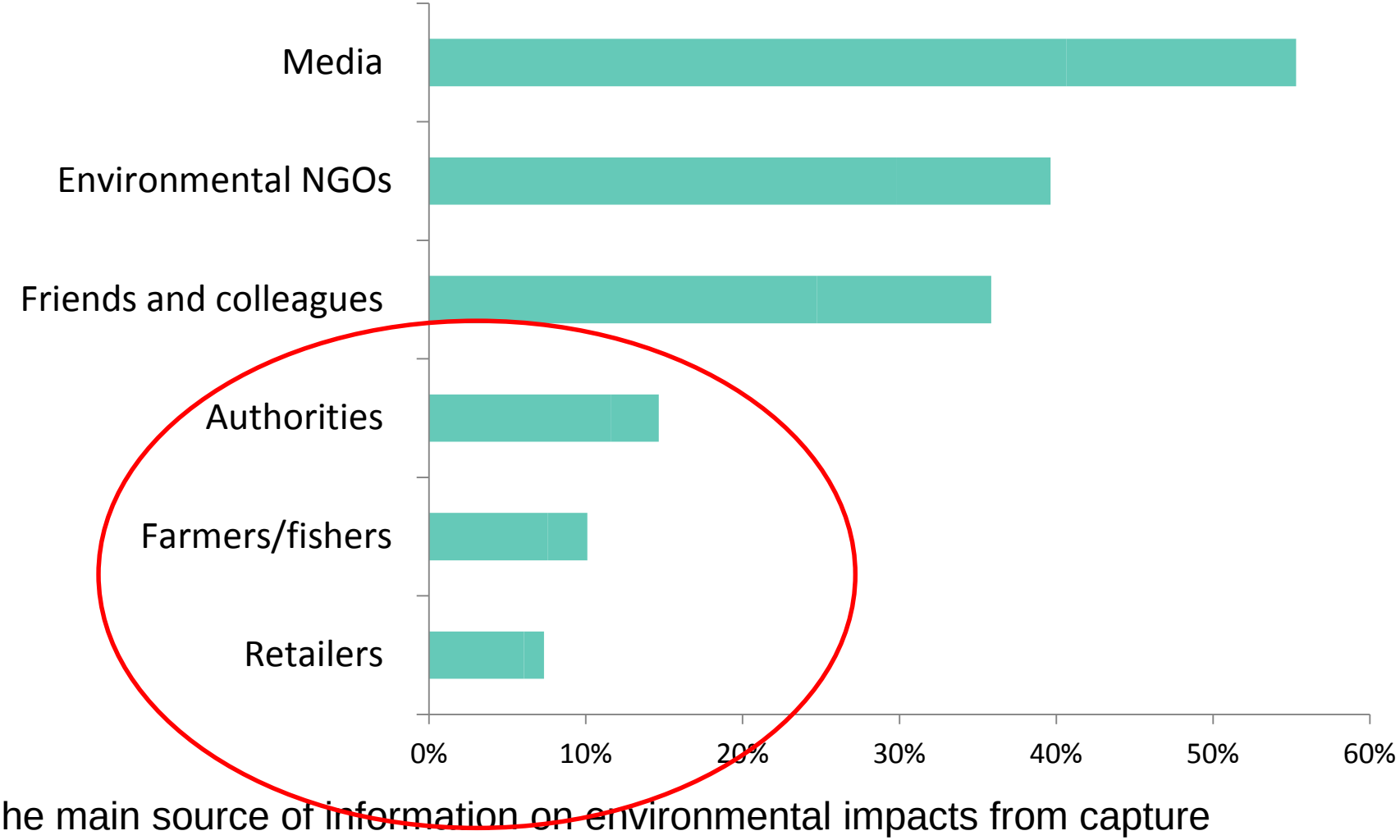
Objective knowledge

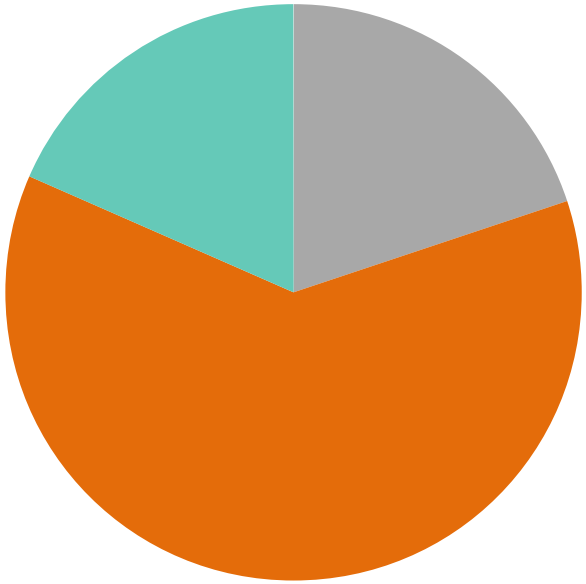
	Question	Correct answers (%) n=406
1.	Salmon is most often farmed in	60
2.	Mussel farming can have a positive impact on the environment since they…	61
3.	Farming of tropical shrimp has been criticized for…	65
4.	Pangasius, Striped catfish, sold in Sweden most often comes from…	52
5.	The national food agency recommends limited consumption of Baltic herring because of high levels of…	65
6.	Which of the following species are “ok to eat,” in terms of environmental sustainability, according to the fish guide from WWF Sweden (2012)	53
7.	Northern prawns are fished mainly through the use of:	73
8.	Wild caught fish sold in Sweden is often labeled “FAO 27.” What does “FAO 27” stand for?	62

From where do consumers obtain information?



The main source of information on environmental impacts from capture fisheries/aquaculture (4-5 on a five point scale)

Stated purchasing of eco-labeled seafood



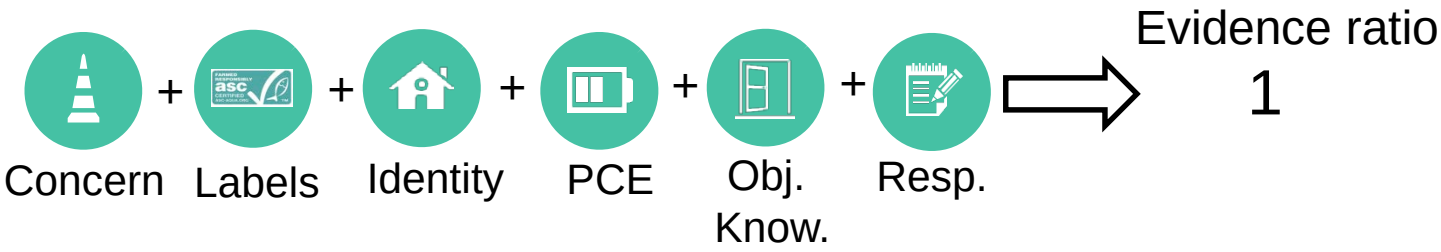
Statistical analysis

- Multimodel Inference (MMI), a relative to Multiple Regression Analysis (MRA) was applied.

- MMI → A number of potential models predicting the dependent variable (stated purchasing behavior) (contrary to MRA where *one* model is obtained).

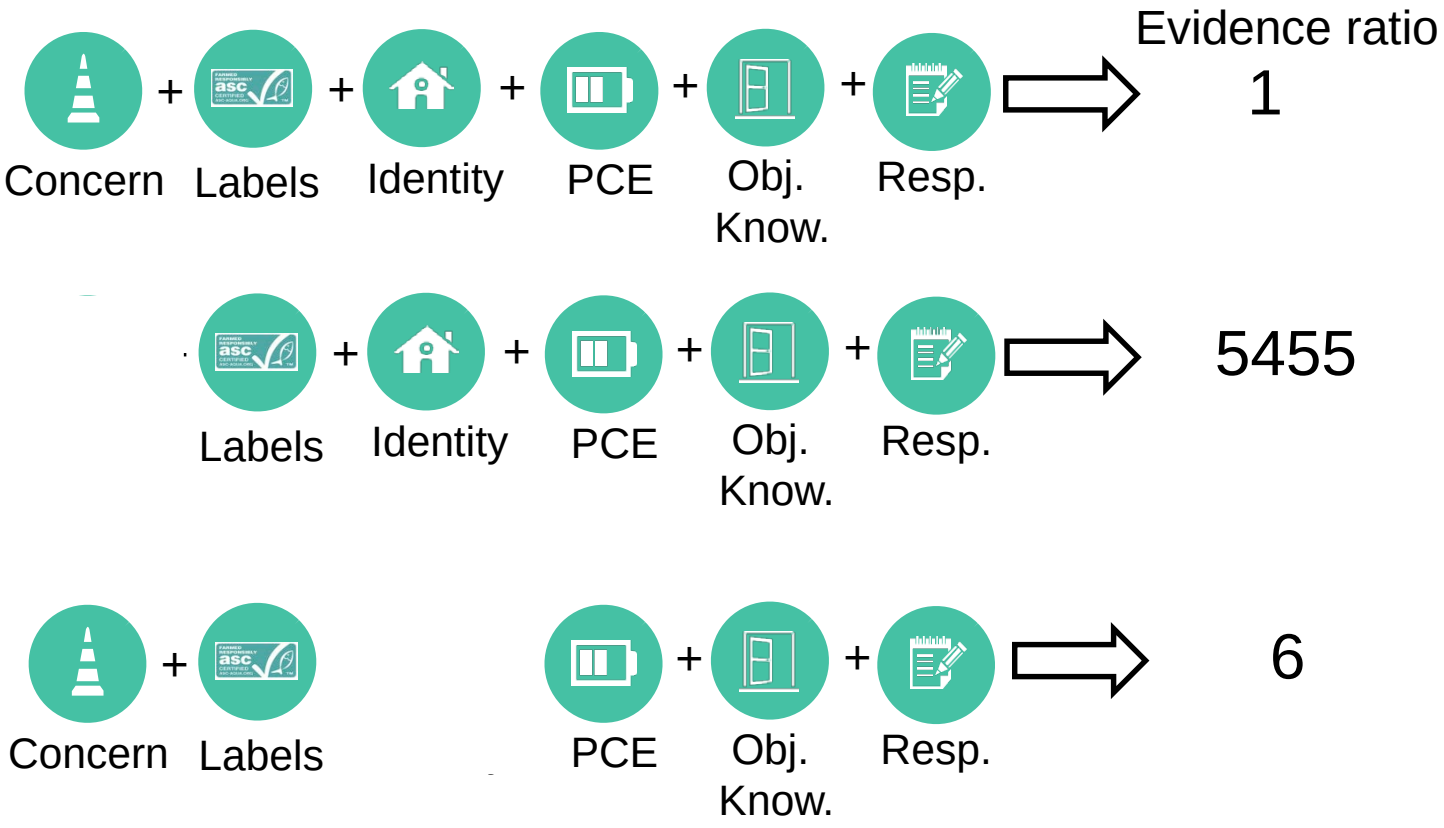
- Key advantages:
  - Models with a high number of variables are penalized
  - Many alternative models can coexist

Multimodel inference



(R^2 =0.26)

Multimodel inference



Multimodel averaged effect sizes

Standardized β-coefficients for all variables *
The weight of each individual model
→ Model averaging

Provides information of the predictive power of all variables included in original model.


ECO

I would say that the eco-labelled salmon is the better alternative… since it's eco-labelled, that I as a consumer can trust that it's better for the environment than the mussels in this case. (Female 48 years)