



FUTURE
EU AQUA

CONSUMER AWARENESS ABOUT
AQUACULTURE IN EUROPE //
A COMMUNICATION CAMPAIGN IN THE
FUTUREEU AQUA PROJECT.

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 817737.



Duration: Oct 2018 - Sep 2022 (+C19 extension)

Coordinator: Nofima, Åsa Maria O. Espmark

“Investigate future fish farming through the value chain, in various production systems and with various species, from the genetics to processing and packaging, including societal and economic aspects.”

Partners:

SalmoBreed AS, Akvaforsk Genetics Center AS, Danish Salmon, SalMar Farming, Sveriges Lantbruksuniversitet, Danmarks Tekniske Universitet, Aller Aqua A/S, Stichting Wageningen Research, COISPA Tecnologia & Ricerca Scarl, Alma Mater Studiorum – Università Di Bologna, Università Politecnica Delle Marche, Istituto Zooprofilattico Sperimentale Delle Venezie, Economia del mare di Casali Roberto, Alintel SrlPP Srl, AlmaPlasma, Tagliapietra e Figli Srl, University of Thessaly, Hellenic Centre for Marine Research, Galaxidi Marine Farm AE, Irida AE-Products for Animal Production-Services, Nireus Aquaculture SA, Kefalonia Fisheries Industrial and Commercial Company AE, Cibo e Salute Srl, Marin Biogas, Federation of European Aquaculture Producers, University of Haifa, Cambden BRI Magyarország Nonprofit Korlátolt Felelőségi Társaság, Piraeus University of Applied Science, Vork Dambrug, Osland Stamfisk AS, International federation of organic agriculture movements European Union Regional Group

Our WORK PLANS

FutureEUAqua will promote innovations in the whole value chain, including:



SUSTAINABLE BREEDING

Assessing, validating and demonstrating the level of the ability of the current breeding programs, breeding goals and methodologies.



INGREDIENTS & FEED

Ensuring sustainable and resilient production by focusing on high fish performance, health and product quality.



PRODUCTION SYSTEMS

Documenting tailor-made fish perform in future cost-effective production systems that function optimally.



QUALITY & SAFETY

Developing innovative high quality minimally processed fish products and related packaging conditions, in order to valorise aquaculture raw materials.



MONITORING TECHNOLOGIES

Monitoring the impact of housing environments and innovative diets on the fish health and welfare.



CONSUMER AWARENESS

Improving consumer awareness, perception and acceptance of European aquaculture products and methods.



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THE EXPERIMENT

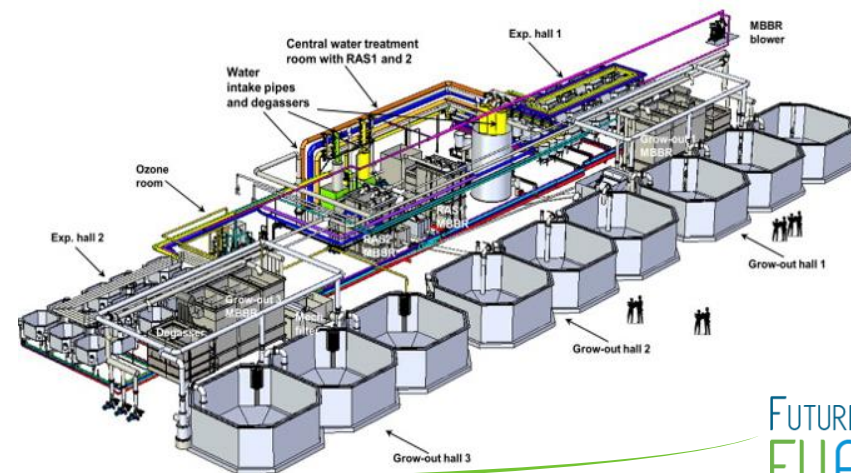
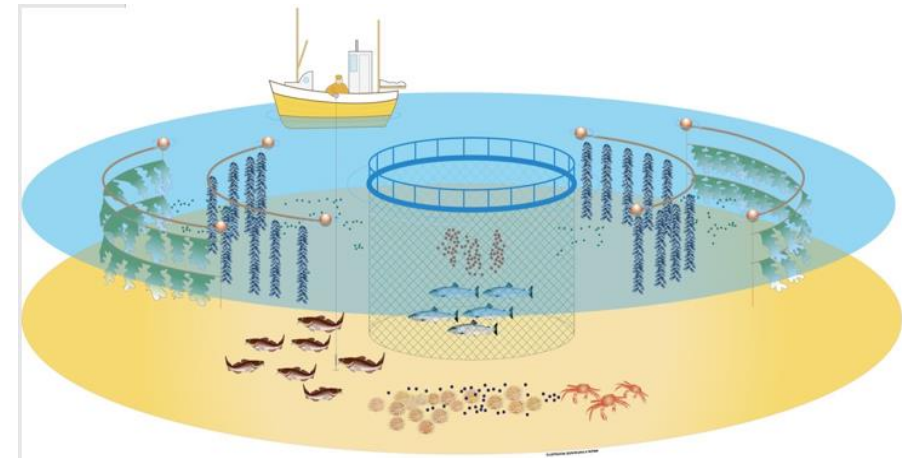
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Experimental conditions

Condition 1 (factual + photo)

Sustainable aquaculture in Europe is growing in full control of new feed sources and water quality to deliver high quality fish



Experimental conditions

Condition 2 (emotional + photo)

Sustainable aquaculture in Europe is making sure that we and our children can enjoy tasty and healthy fish in the future



Experimental conditions

Condition 3 (factual)

Sustainable
aquaculture in Europe
is growing in full
control of new feed
sources and water
quality to deliver high
quality fish

Condition 4 (emotional)

Sustainable
aquaculture in Europe
is making sure that we
and our children can
enjoy tasty and healthy
fish in the future

Condition 5 (Control)

Sustainable
aquaculture in Europe
is growing with focus
on new feed sources,
water quality, fish
quality and welfare

Experimental measurements

Please imagine that the information above has been posted on twitter and Instagram. Please pay attention to the image and text and reply to the questions below:

- **This post was easy to understand**
- **I like this post**
- **I would forward this post on my twitter and Instagram**

...and 3 open ended questions

- **I like this post because...**
- **I dislike this post because...**
- **This post is not interesting because...**

Descriptives

- Consumption frequency (wild, farmed)
- Education
- Occupation
- Household income
- Number of children in household
- City size
- Marital status
- Use of social media

Field work

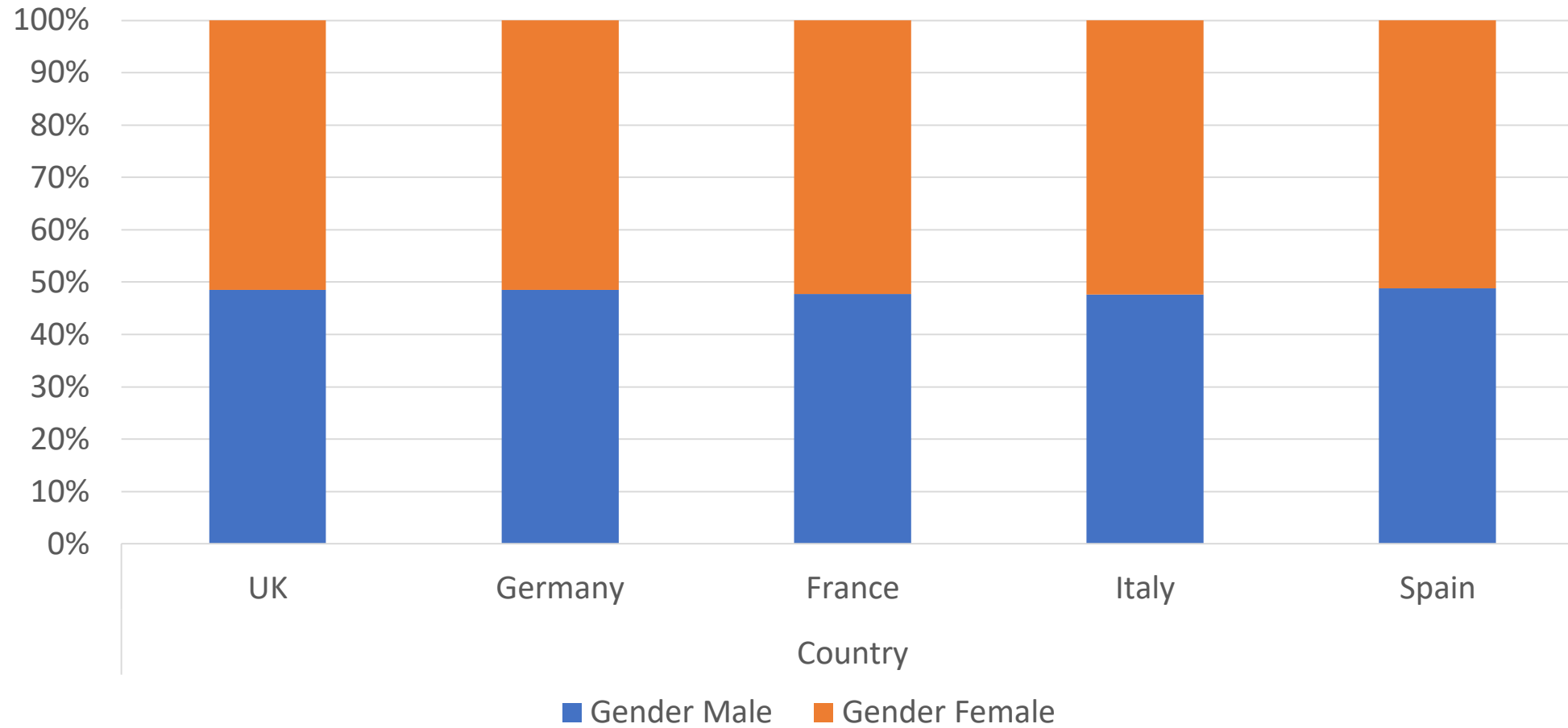
Sample population

- Recruited by YouGov
- Seafood consumers
- At least partly responsible for the shopping and preparation of food in their household
- 500 per country, 2500 total

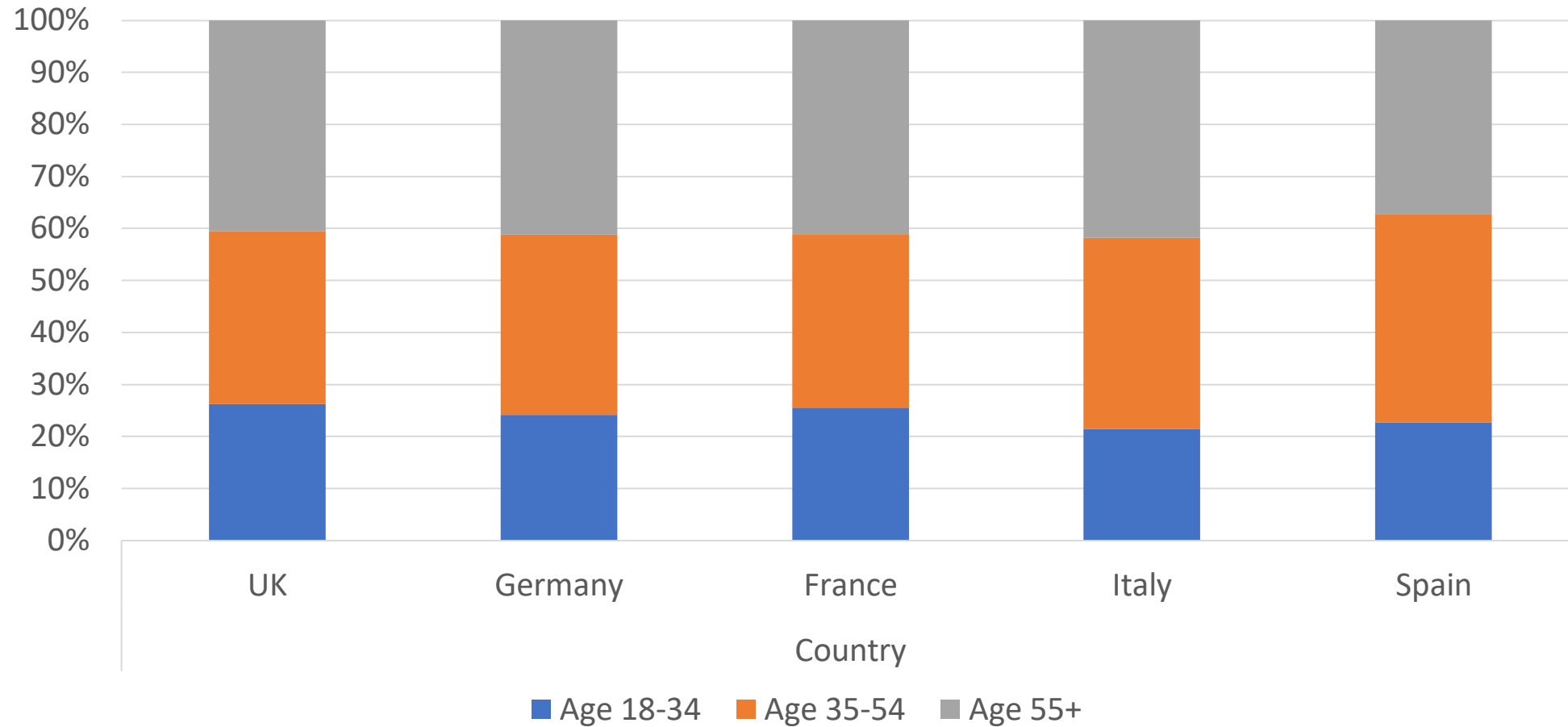
Countries

- UK
- France
- Germany
- Spain
- Italy

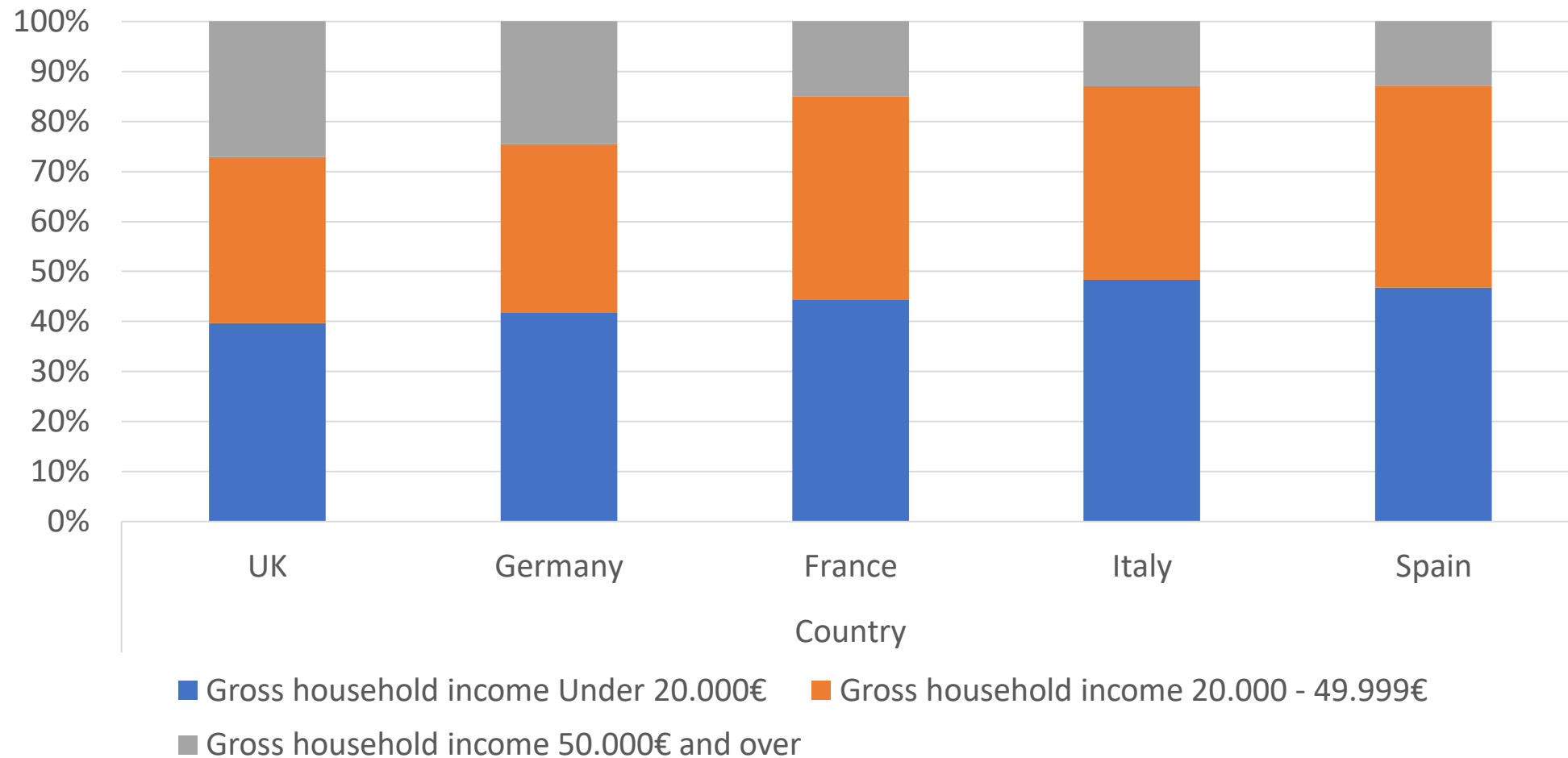
Sample description



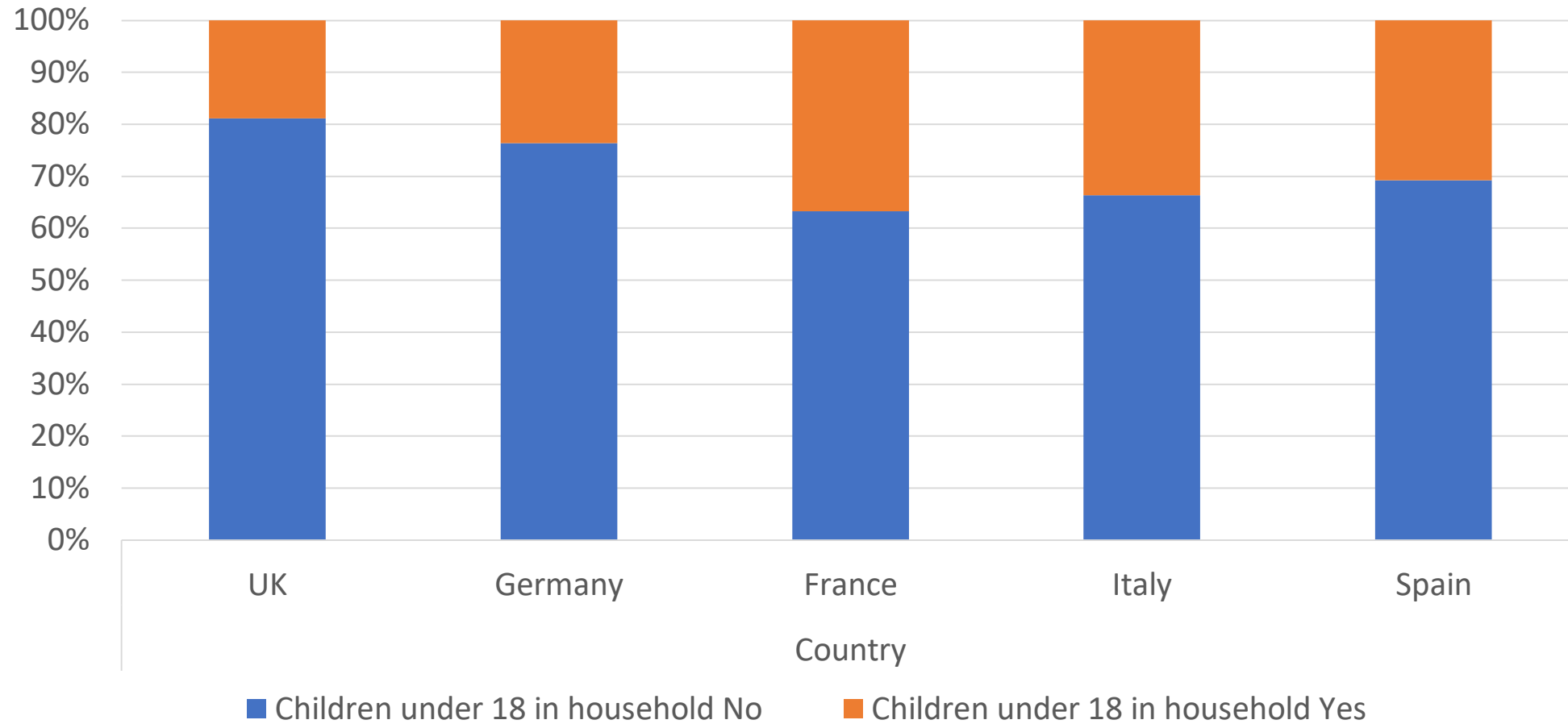
Sample description: Age



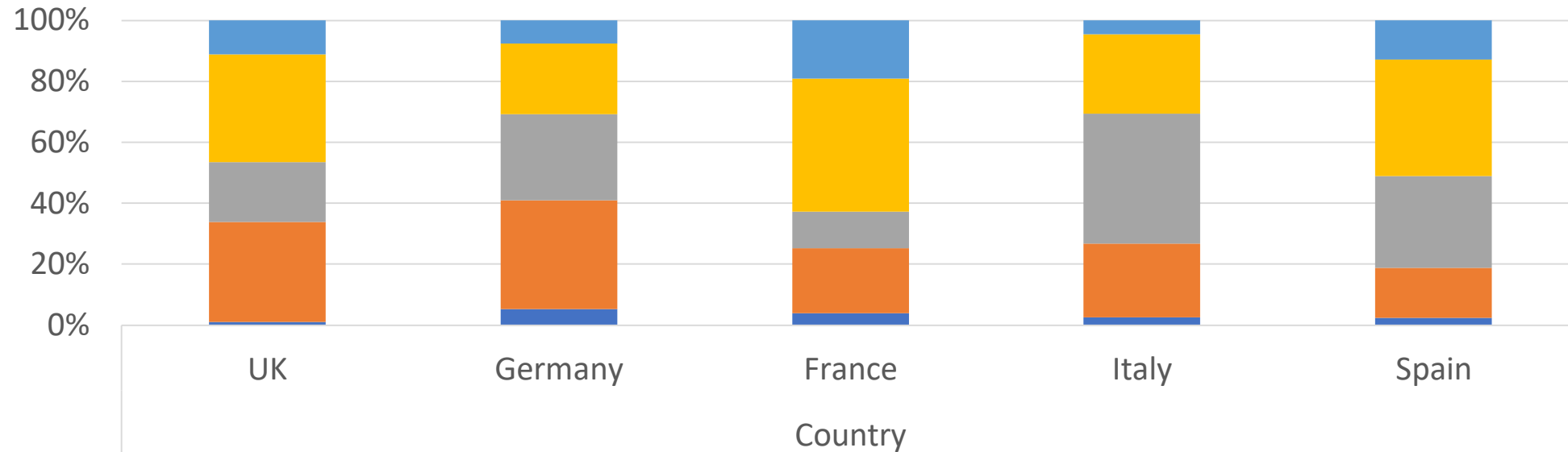
Sample description: Household income



Sample description: Children

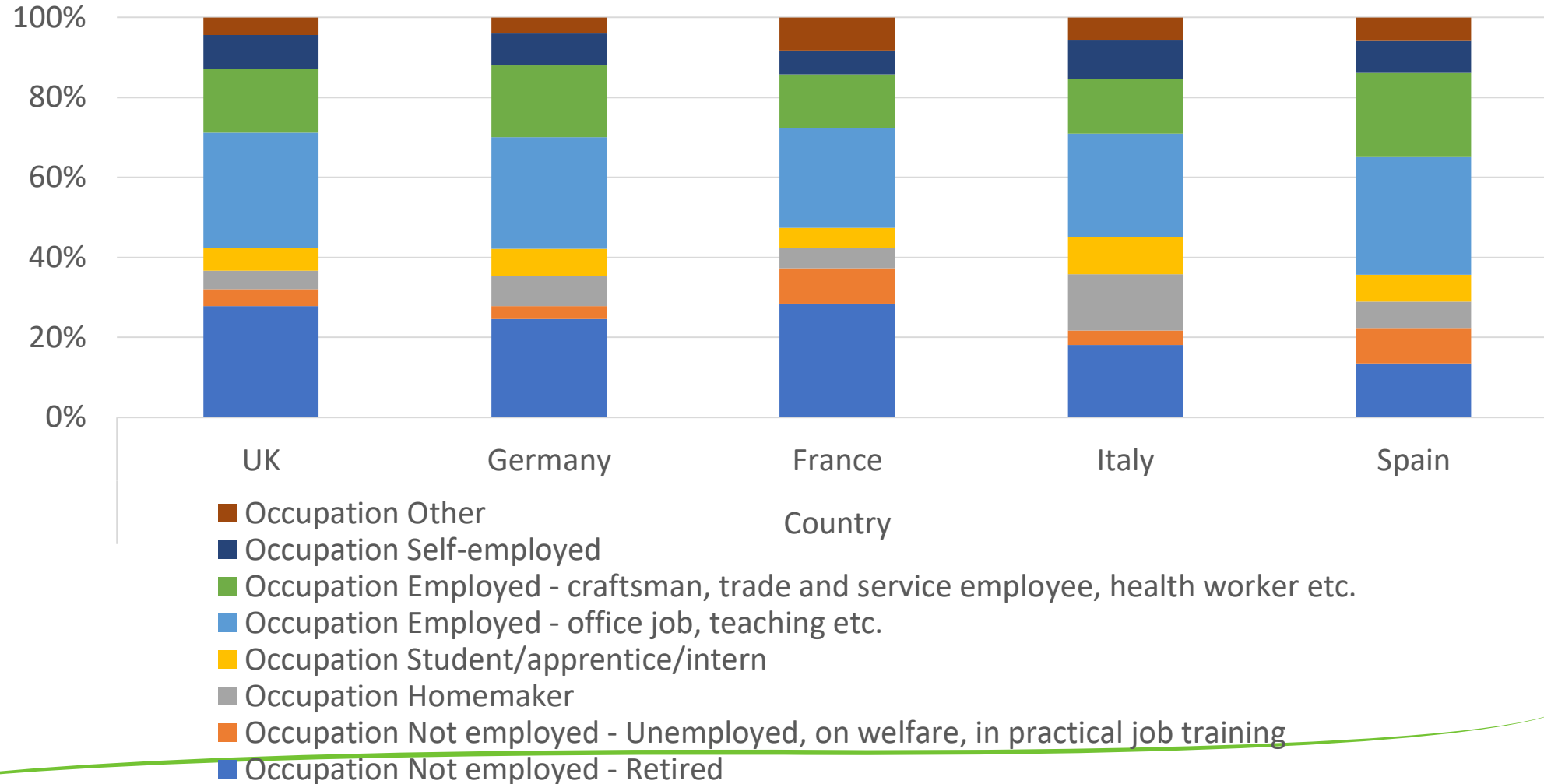


Sample description: Education

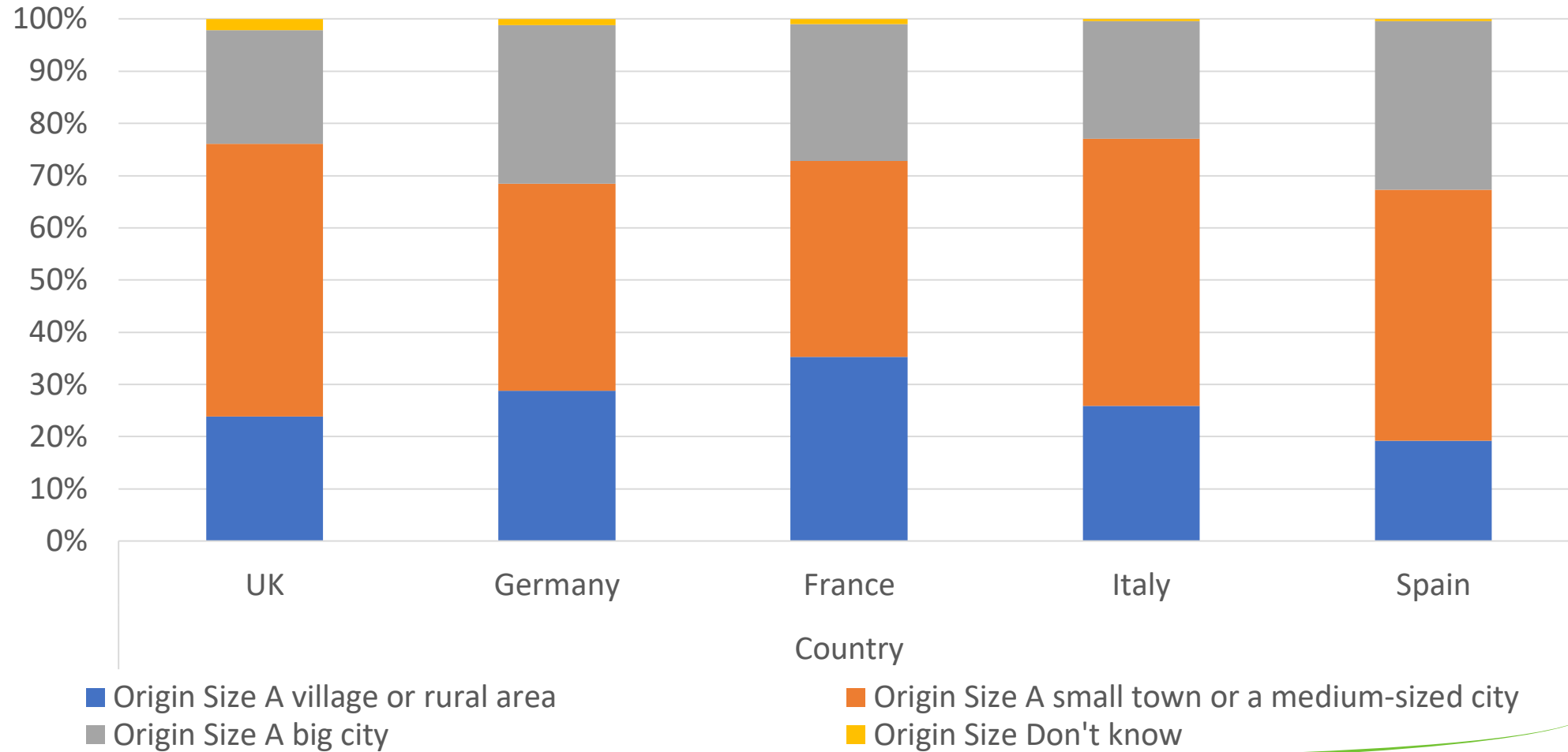


- Education Post- Graduate Education (M.A., Ph.D., etc)
- Education College/University Degree (B.Sc., B.A., etc)
- Education Professional qualification of degree level
- Education Secondary
- Education Primary

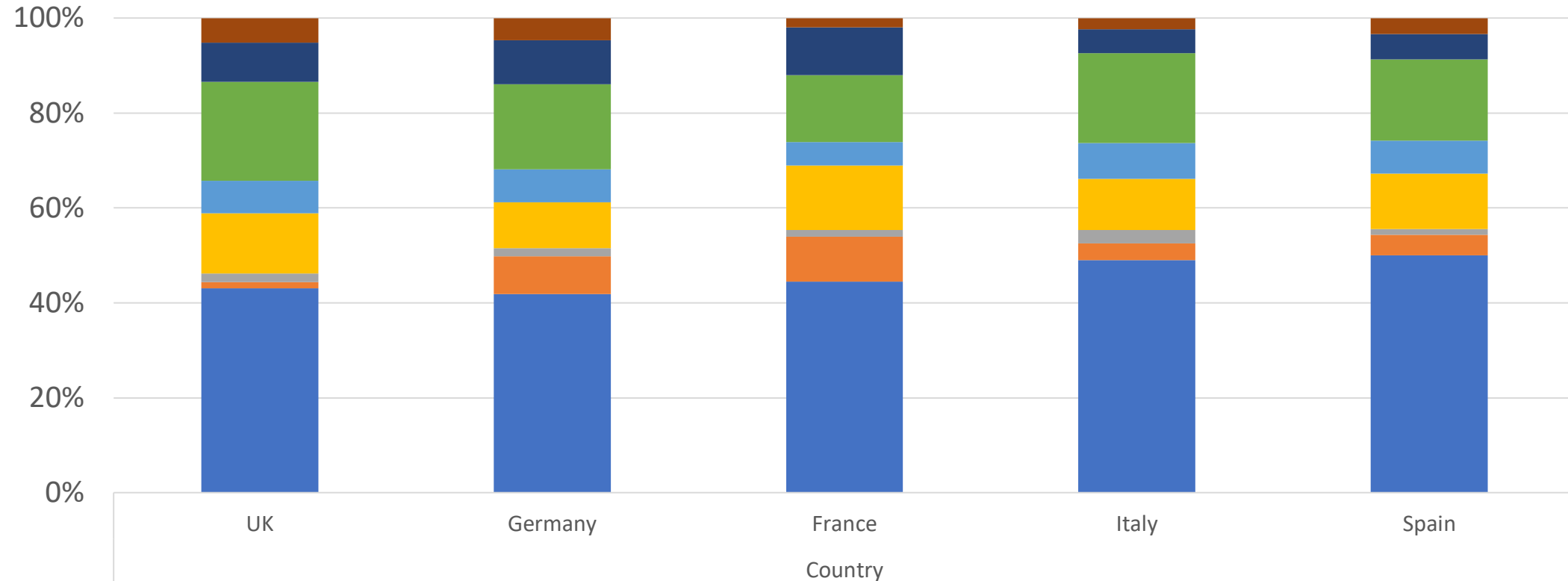
Sample description: Occupation



Sample description: Living area



Sample description: Marital status



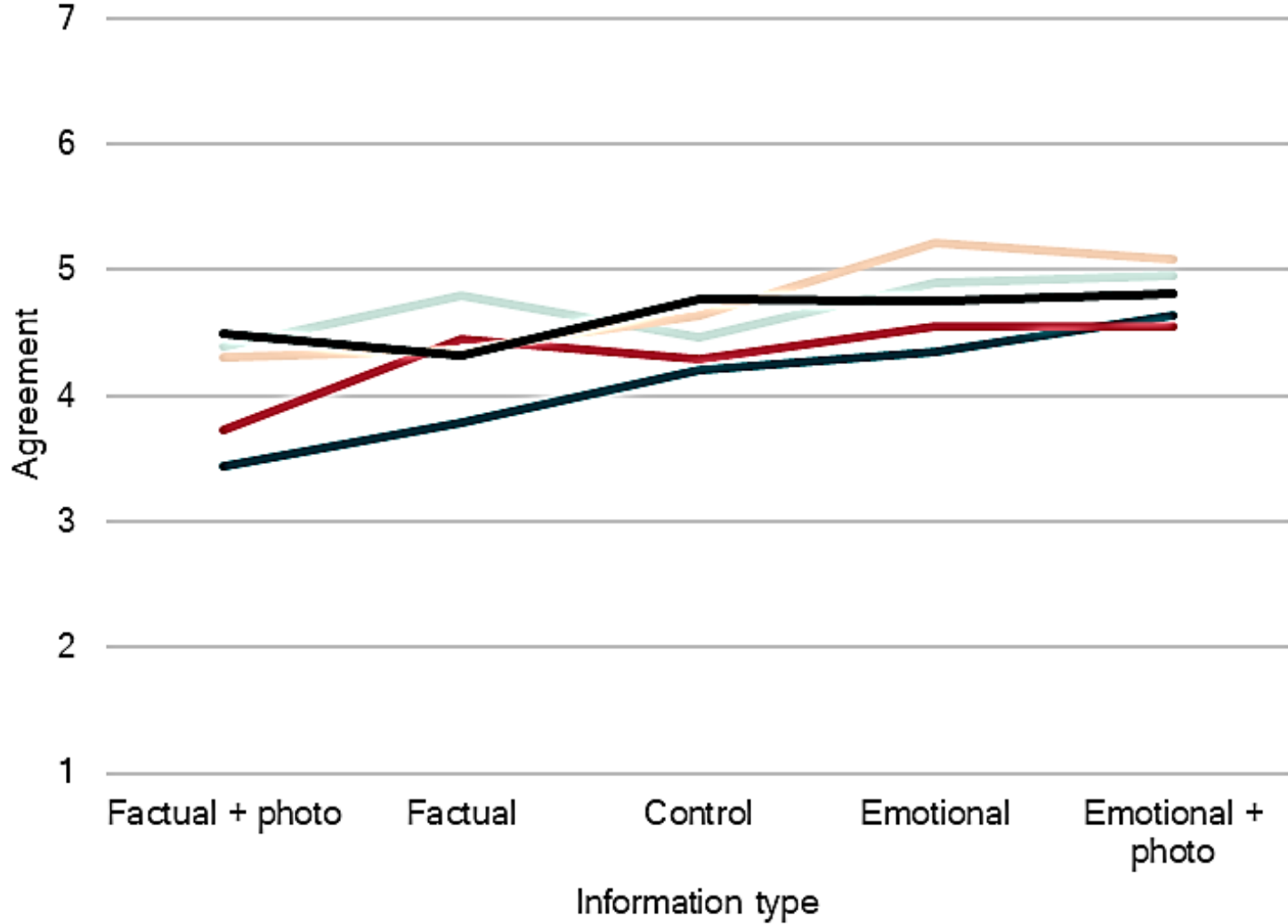
- B6. What is your current marital or relationship status? Widowed
- B6. What is your current marital or relationship status? Divorced
- B6. What is your current marital or relationship status? Single
- B6. What is your current marital or relationship status? In a relationship, but not living together
- B6. What is your current marital or relationship status? Living with a partner but neither married nor in a civil partnership
- B6. What is your current marital or relationship status? Separated but still legally married or in a civil partnership
- B6. What is your current marital or relationship status? In a civil partnership
- B6. What is your current marital or relationship status? Married

GLM of experimental conditions, central independent variables and covariates



Independent Variable	Dependent Variable	Sig.
Experimental condition	This post was easy to understand	<0.001
	I like this post	<0.001
	I would forward this post on my twitter and Instagram	0.015
Country	This post was easy to understand	<0.001
	I like this post	<0.001
	I would forward this post on my twitter and Instagram	<0.001
Gender	This post was easy to understand	0.016
	I like this post	<0.001
	I would forward this post on my twitter and Instagram	0.018
Age category	This post was easy to understand	0.538
	I like this post	0.339
	I would forward this post on my twitter and Instagram	0.088





- Country
- UK
 - DE
 - FR
 - IT
 - ES

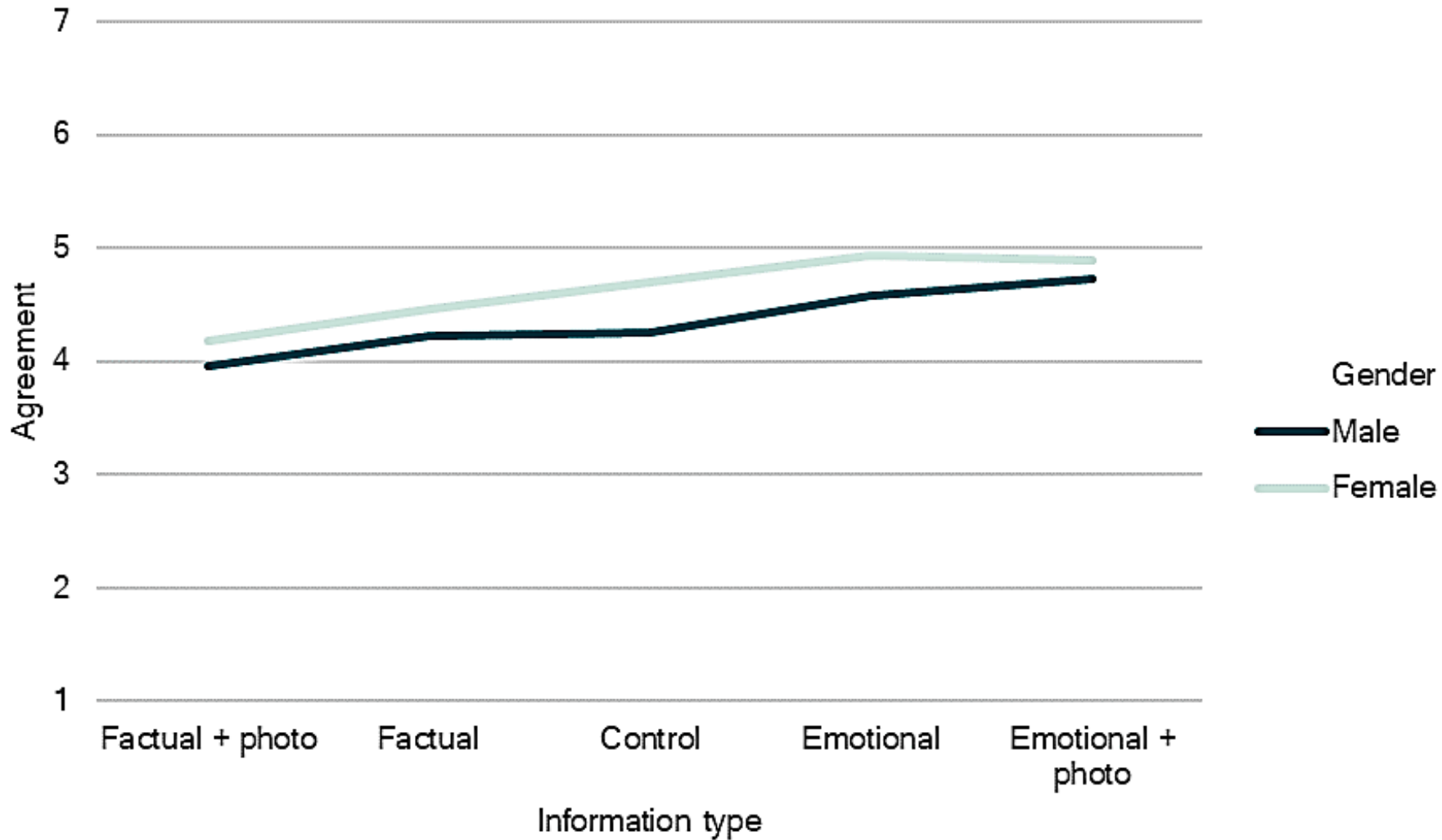
- Europe:
- UK
 - France
 - Germany
 - Spain
 - Italy

2,500 consumers

500 participants from each country

Country differences for liking of the five social media posts





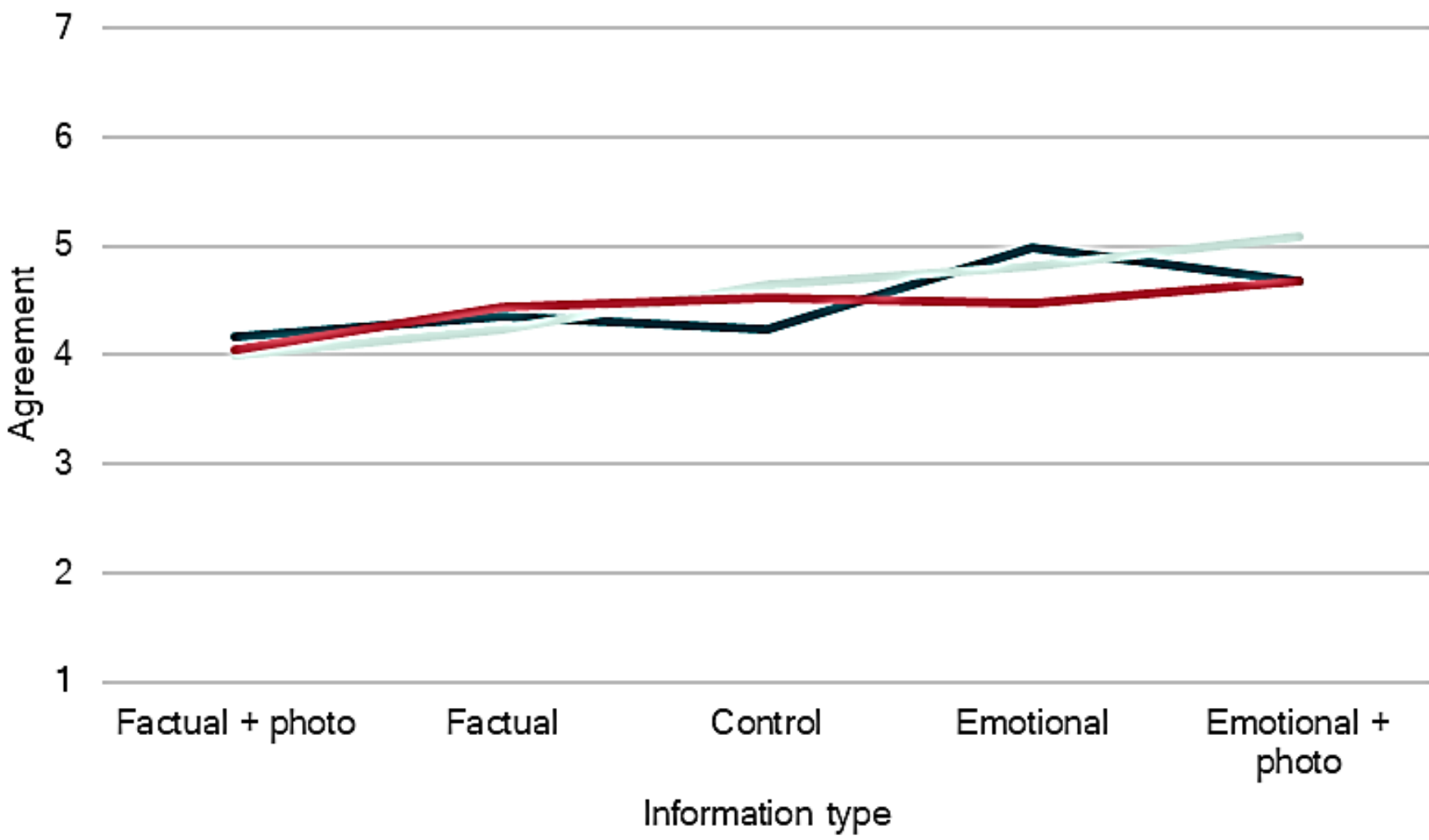
- Europe:
- UK
 - France
 - Germany
 - Spain
 - Italy

2,500 consumers

500 participants
from each country

Gender differences for liking of the five social media posts





- Age
- 18-34
 - 35-54
 - 55+
- Europe:
- UK
 - France
 - Germany
 - Spain
 - Italy

2,500 consumers

500 participants from each country

Age differences for liking of the five social media posts



Explanations

results from UK



Condition 2 (emotional + photo)

Sustainable aquaculture in Europe is making sure that we and our children can enjoy tasty and healthy fish in the future
#EUaquaculture
#futureEUaqua
#sustainability



I like this post because...



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RECOMMENDATIONS FOR A COMMUNICATION STRATEGY

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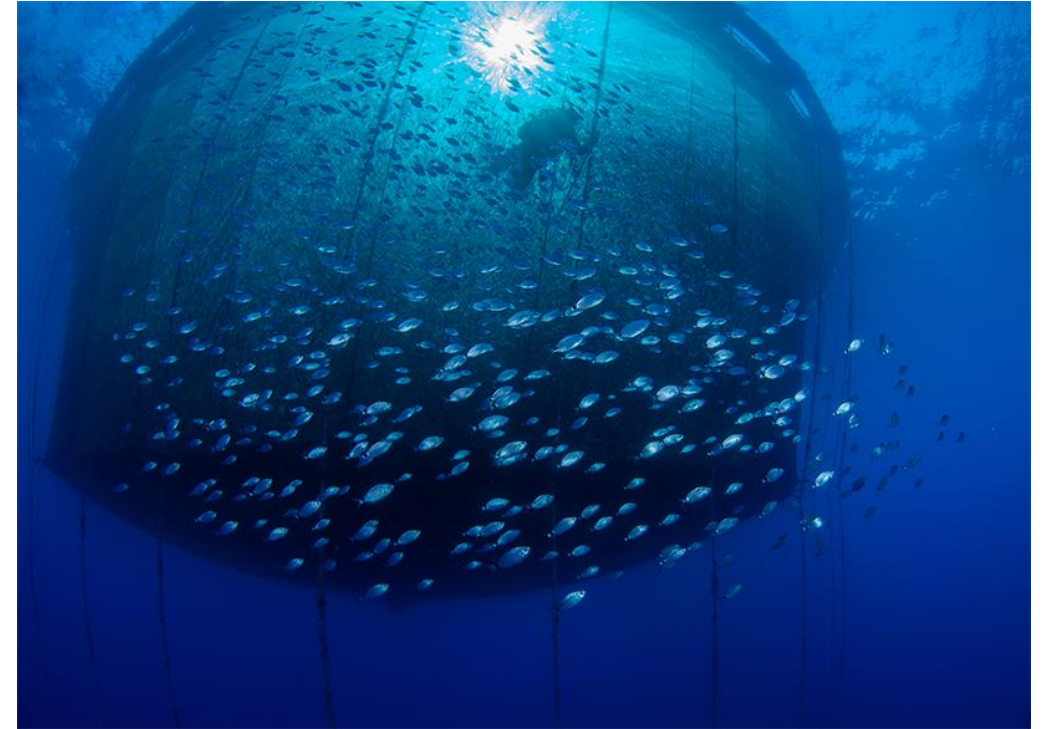


The main aim of this communication strategy is:

Increase consumer awareness, perception, and acceptance of European aquaculture.

Recommendations based on:

- **Scientific literature**
- **Evaluations** of the effectiveness of previous and current communication **campaigns**
- The **consumer survey** results from earlier tasks
- **Experimental testing** of the types of social media messages that consumers prefer





General social media communication strategy targeting consumers:

- Previous tasks & project OrAqua →
 - raise awareness through a communication campaign
- Previous campaigns →
 - Avoid a general approach to aquaculture and sustainability
 - Begin by providing general information
 - then adding more specific details on production systems (e.g., organic) and effects on the environment (e.g., carbon footprint).
- Stimulate consumers' **emotions** →
 - maximize the possibility to understand, like, and sympathize with the message
- Add matching image →
 - **amplify consumers' emotions**



General social media communication strategy targeting consumers:

- UK and France are the most **sceptical**
- Italian and Spanish are the most **positive**
- German liked **factual** posts without an image more than participants from other countries, yet, their highest liking was for **emotional** posts.
- **Emotional messaging should be used**
- **Female** consumers more positively → target them as influencers.
- **Younger** participants are less positive about pictures with emotional messages → target without pictures as part of the campaign.
- Willingness to repost generally low → **motivate** people to repost



General social media communication strategy targeting consumers:

- **Facebook** is most frequently used
- Campaign focus on Instagram and Twitter, + **repost/forward** Facebook
- Younger consumers through **Instagram**
- 35- to 55-year-old through **Twitter**
- Three social media platforms are used by all → no extreme differentiations

Emotional messaging **liked**

because:

- Simple and informative
- Pleasant colours
- Pictures of food
- Nice and tasty looking fish

Factual messaging **disliked** because:

- Complicated
- Confusing
- Overly detailed
- Unclear
- Cluttered
- Difficult to interpret



General social media communication strategy targeting consumers:

- **Economic benefits** of aquaculture for local communities → challenging but positive
- Animal and fish welfare →
- Environmental pollution →
 - **sensitive issues** →
 - should be avoided
- Familiar & specific environmental issues (e.g., CO2 footprint) → **effective** (EUMOFA 2017).



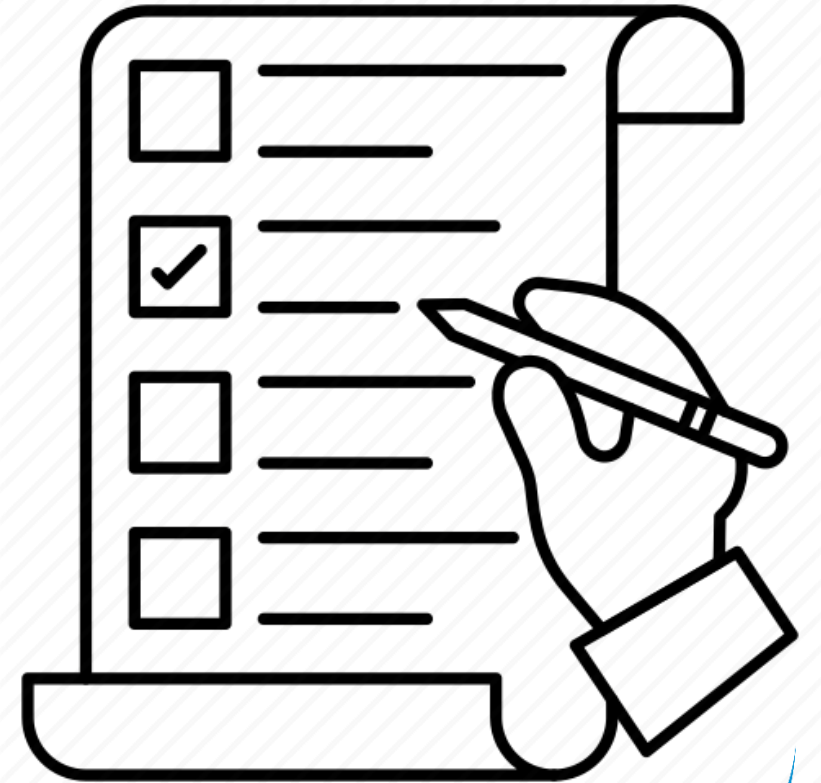
Social media communication strategy targeting specific groups:

- **Policy makers** → tweets, more technical language. Carefully directed towards a specific group.
- **Young adults and teenagers** → no reference to children. Focus on the protection of nature for everyone
- **The industry** → adding labelling advice from eye-tracking studies in FutureEUaqua
- **Visual elements (e.g. emoji)** added to increase effectiveness per target group



Action plan for a communication strategy:

- ❑ Detailed **plan** of specific social media posts developed in accordance with increasing awareness of aquaculture in Europe.
- ❑ FEAP → **dissemination**: reports, infographics, videos and pictures → attract the attention of consumers
- ❑ FEAP/Nofima's media communication experts → **content** of social media posts
- ❑ **Sources** → literature, recent and current communication campaigns and the FutureEUAqua surveys and experiments
- ❑ Communication **material**: start with a broad focus on aquaculture → focus specifically on current and relevant information → production methods, environmental effects, benefits and challenges.



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CONCLUDING ONE-PAGER

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Communication strategy for increased consumer awareness about aquaculture in Europe

