

## Supplementary Materials

### Questionnaire items

(for other languages see [https://osf.io/tjrg3/?view\\_only=28e84172b08f4e55b68eeb613bfa3e39](https://osf.io/tjrg3/?view_only=28e84172b08f4e55b68eeb613bfa3e39)).

[information letter & consent form]

\* \* \*

*[Prior knowledge about Fairphone]*

First, we would like to ask you some questions about different companies that produce mobile phones.

\* \* \*

1. Which of these companies strive(s) to use fair, recycled, and responsibly mined materials in their phones? Select all that apply.

- Apple
- Fairphone
- Nokia
- OnePlus
- Samsung

2. Which of these companies has modular, easy-to-repair phones? Select all that apply.

- Apple
- Fairphone
- Nokia
- OnePlus
- Samsung

3. How familiar are you with the Fairphone brand?

(1 = very unfamiliar to 7 = very familiar)

\* \* \*

Please read the following carefully, as this information is important for the rest of the study.

### Information about Fairphone

Fairphone was founded in Amsterdam in 2013 to create a more sustainable mobile phone. Fairphone strives for less harmful impact across the value chain in mining, design, manufacturing and life cycle. Their latest device, Fairphone 4 5G, is a modular device that allows easy repair. For instance, the battery is replaceable and it is made from fair and recycled materials in the supply chain, such as Fairtrade Gold or recycled plastics. It is also electronic-waste neutral and comes with a rare 5-year manufacturer warranty to support the longevity of the device.



## Fairphone 4

Our most sustainable phone yet, now with 5G speed, 5-year warranty and electronic waste neutral. Choose the Fairphone for you.

£499.00

Including taxes and duties. Excluding shipping costs.

Color: Grey



Storage / memory: 128GB, 6GB RAM



Choose what's included

\* \* \*

The next questions ask about your feelings about the Fairphone.

\* \* \*

### [[Emotions about Fairphone]]

We are now going to ask you about your **feelings** about the Fairphone. Please indicate how much you agree with the following statements.

(7-point Likert-scale from 1 = *completely disagree* to 7 = *completely agree*)

When I think about buying or using a Fairphone, I feel...

... worried, joy, guilty, sad, angry, uncertain, excited, proud, in awe, hopeful, annoyed

\* \* \*

### [[Overall attitude]]

[[7-point Likert scale - the different differentials are the scale endpoints]]

I think the Fairphone smartphone is...

bad - good

unreliable - reliable

untrustworthy - trustworthy

immoral - moral  
ugly - beautiful  
negative - positive  
unjust - just

\* \* \*

Next, we would like to ask you some questions about how much you trust Fairphone.

*[[Trust]]*

Please indicate how much you agree with the following statements.

*(1 = completely disagree, 7 = completely agree)*

- "I think the Fairphone organization is able to contribute to a more sustainable environment"(ability)
- "I think the Fairphone organization is guided by sound morals" (integrity)
- "I think the Fairphone organization aims to contribute to a better environment for people like myself." (benevolence).

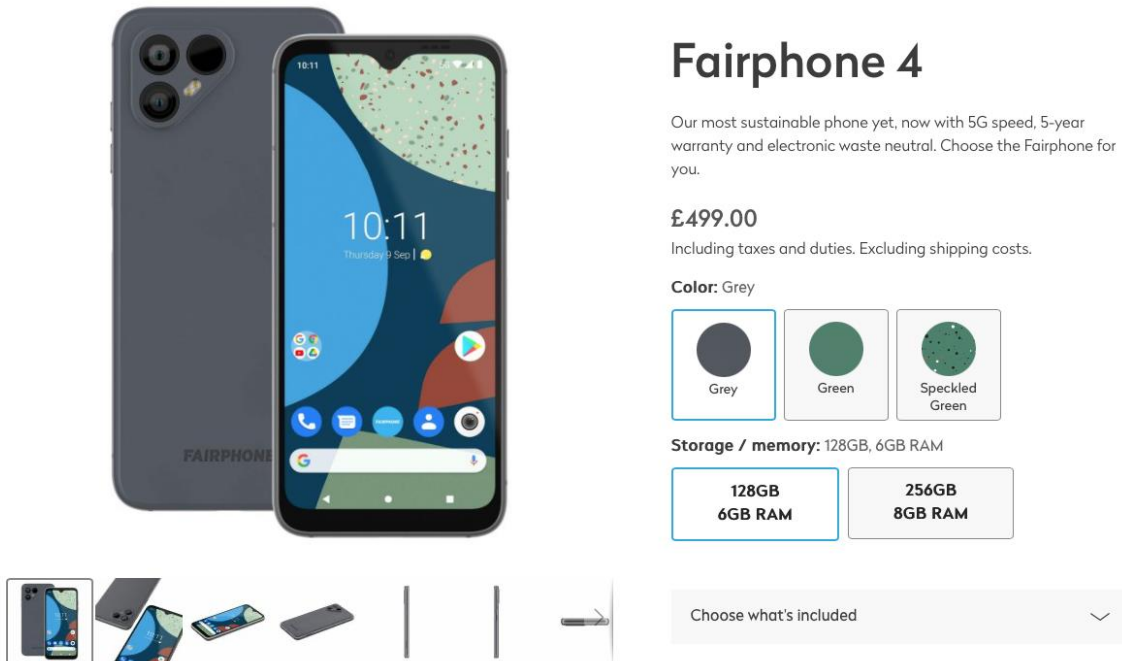
"I consider the Fairphone smartphone to be a reliable product"

\* \* \*

*[[Dependent variable (intention to buy a Fairphone)]]*

The next questions are about your willingness to consider buying a Fairphone. Please read carefully through the phone specifications and then answer the questions below.

Fairphone 4



The image shows a product page for the Fairphone 4. On the left, there are images of the phone from the back and front. The back view shows a dark grey case with two camera lenses. The front view shows the phone's screen with a colorful abstract wallpaper, the time 10:11, and the date Thursday, 9 Sep. Below the main images is a horizontal strip of smaller images showing different views and accessories of the phone.

## Fairphone 4

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**£499.00**  
Including taxes and duties. Excluding shipping costs.

**Color:** Grey

Grey Green Speckled Green

**Storage / memory:** 128GB, 6GB RAM

128GB 6GB RAM 256GB 8GB RAM

Choose what's included



Please indicate how much you agree with the following statements:  
 (1 = completely disagree to 7 = completely agree)

"I am considering buying a Fairphone"

"I am willing to switch to Fairphone"

"The next time I am buying a new phone, I will buy a Fairphone"

\* \* \*

This next section is more general. We would like to know more about your purchase decisions and what is important to you.

\* \* \*

[[Product and brand characteristics]]

"How important is .... to you when you purchase a new phone"

(1 = not very important to 7 = very important)

- Price
- Appearance
- Technical specifications
- Quality of the phone
- Size
- Camera
- Sustainability of the phone
- Treatment of the workforce

- The brand's reputation
- Customer service
- Sustainability of the company

\* \* \*

*[[Status]]*

Please indicate what extent you agree with the following statements:

(1 = completely disagree, 7 = completely agree)

- I would buy a product just because it has status.
- I am interested in new products with status.
- I would pay more for a product if it had status.
- The status of a product is irrelevant for me. (R)
- A product is more valuable to me if it has some snob appeal to others.

\* \* \*

*[[Green product interest]]*

(1 = never true to 7 = always true)

- When there is a choice, I always choose the product that contributes to the least amount of environmental damage.
- I have switched products for environmental reasons.
- If I understand the potential damage to the environment that some products can cause, I do not purchase those products.
- I do not buy household products that harm the environment.
- Whenever possible, I buy products packaged in reusable or recyclable containers.
- I make every effort to buy paper products (toilet paper, tissues, etc.) made from recycled paper.
- I will not buy a product if I know that the company that sells it is socially irresponsible.
- I do not buy products from companies that I know use sweatshop labor, child labor, or other poor working conditions.
- I have paid more for environmentally friendly products when there is a cheaper alternative.
- I have paid more for socially responsible products when there is a cheaper alternative.

\* \* \*

*[[Environmentalist Identity]]*

Please indicate what extent you agree with the following statements.

(1 = completely disagree, 7 = completely agree)

- "I see myself as an environmentalist"
- "I am pleased to be an environmentalist"
- "I feel strong ties with environmentalists"
- "I identify with other environmentalists"

\* \* \*

*[[Values]]*

[(egoistic value orientation subscale)]

To what extent are the following values important as guiding principles in your life?

If possible, please vary scores as much as possible and rate no more than two values as extremely important.

( 1 = *not important*, to 7 = *very important*)

1 social power

2 wealth

3 authority

4 being influential

5 being ambitious

\* \* \*

*[[Pro-environmental descriptive norms]]*

(1 = *completely disagree* to 7 = *completely agree*)

Please indicate how much you agree with the following statements

- Most people who are important to me act in environmentally-friendly ways.
- Most people who are important to me try to conserve resources.
- Most of my friends and peers engage in environmentally-friendly behaviors.

Please indicate how much you agree with the following statements

- Most people who are important to me expect me to act in environmentally-friendly ways.
- Most people who are important to me expect me to try to conserve resources.
- Most of my friends and peers expect me to engage in environmentally- friendly behaviors.

*[[Demographics]]*

*[[age]]*

How old are you? Please indicate your age in years (whole numbers).

*[[gender]]*

Please indicate your gender

- Male
- Female
- Other
- Prefer not to say

[[education]]

How many years of education (starting from primary school) have you completed? (whole numbers)

[[income]]

What is your household income? (in Euros)

Is that your household income per month or per year?

Per month

Per year

Is that your household income before or after taxes?

Before taxes ("gross")

After taxes ("net")

[[Rurality]]

Which best describes the area where you live?

1 = A big city

2 = The suburbs or outskirts of a big city

3 = A town or a small city

4 = A country village

5 = A farm or home in the countryside

[[Political orientation]]

- "Please indicate where you are on the political spectrum using the left-right continuum below." (1 = *very left-wing*, 11 = *very right-wing*)
- "Are you more interested in promoting social change (progressive) or promoting tradition (conservative)?" (1 = *very progressive*, 11 = *very conservative*)
- "On the following issues/dimensions, how politically left or right are you?" (1 = *very left wing*, 11 = *very right-wing*)

Economic

- The political left is more socialist and usually emphasises income equality, higher tax rates on the wealthy, government spending on social programmes and infrastructure, and stronger regulations on business.

- The political right is more capitalist and usually emphasises lower taxes and less regulation on businesses, reduced government spending, and thereby more economic freedom

Social

- The political left values supporting those who cannot support themselves, and believe in equality
- The political right values tradition, self-reliance, and believe in personal responsibility

\* \* \*

*[[Actual interest in Fairphone]]*

Click to learn more about Fairphone, their mission, and their different phones:

<https://www.fairphone.com/en/> . The link will open in a new window, allowing you to come back to it after finishing the survey.

**Open the new window if you want, but first stay on this page to complete the study and receive your payment!**

\* \* \*

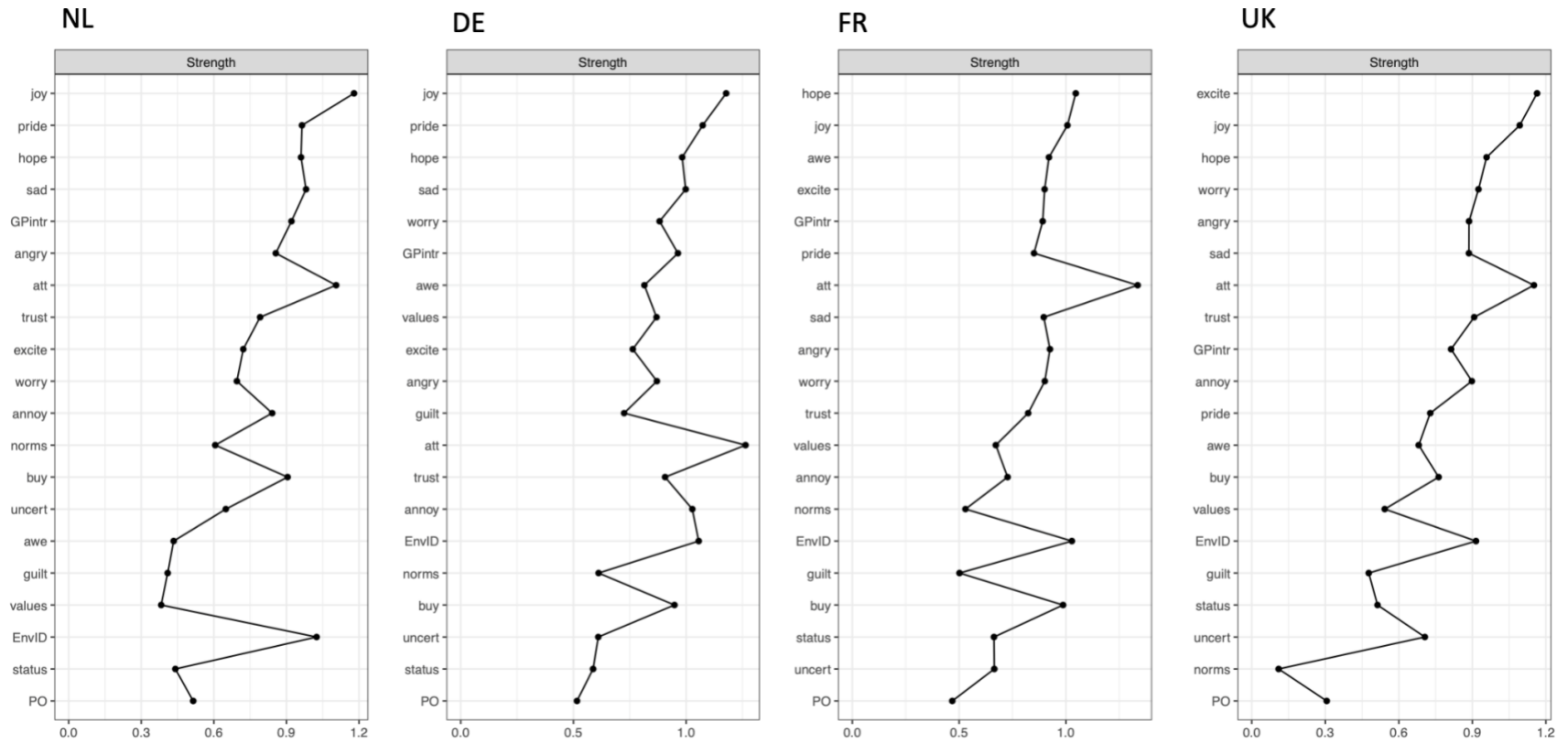
[Debriefing]



# Centrality

## Figure S1

Node Centrality (Strength) Per Country



## Measurement Invariance

### *Purchase intention*

The factor loadings of purchase intentions differed across countries. No weak invariance was found. The factor loadings differed the most for France (see Figure SX). When France was removed from the sample, a weak invariance but no (partial) strong invariance was found. Because no (partial) strong measurement invariance was found it is not recommended to compare the four countries on the purchase intention variable.

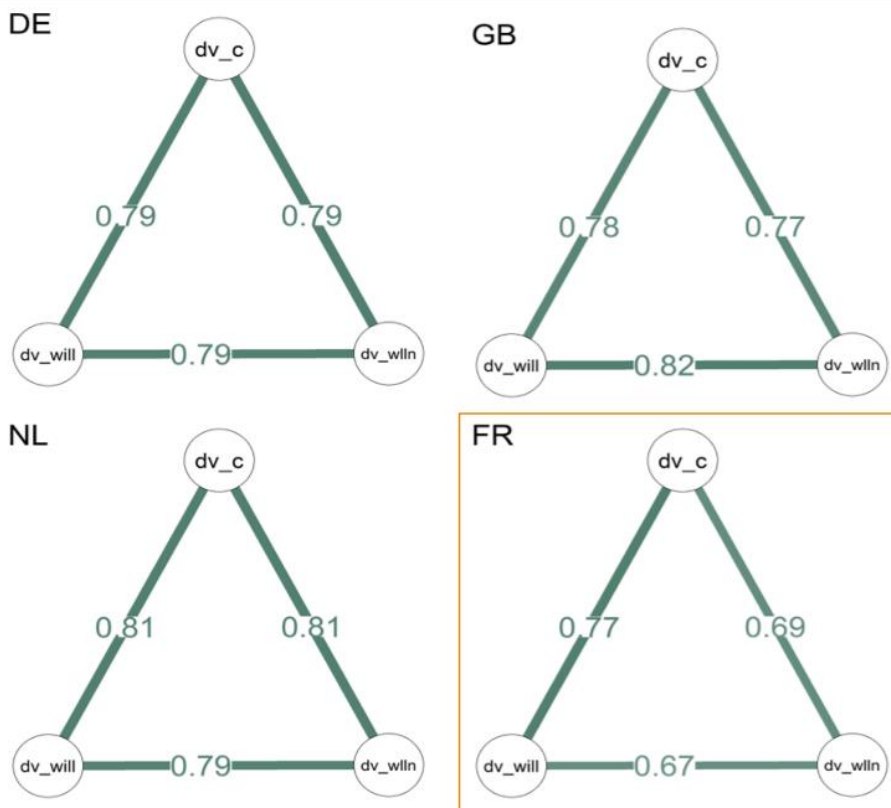
### *Other variables*

Measurement invariance was also tested for other scales that were frequently related to purchase intention in the network analyses. None of these scales reached strong or strict measurement invariance.

- For the *status* composition scale, configural invariance but no weak invariance was found. This means that the factor loadings for the status composition scale differ across the countries.
- The *semantic differential* scale showed poor fit for a confirmatory factor analysis (CFA) with one indicator. The fit had to be improved using modification indices. When testing for measurement invariance, the test for configural variance did not hold.
- The initial CFA for *green product interest* showed convergence problems due to highly correlated factors. After adjusting the CFA, the data of France still caused convergence problems. When France was removed, strong (but no strict) measurement invariance held.

**Figure S2**

*Measurement Invariance Network Graph for Purchase Intention Items Per Country.*



### Network Comparisons

The Network Comparison Test uses resampling-based permutation testing to compare network structures from two independent, cross-sectional data sets on three types of invariance: network structure, edge strength, and global network strength (van Borkulo et al., 2022).

Comparing invariant network structure involves comparing all the edges in the networks as a whole, evaluating the null hypothesis that all the edges are equal. The multiple testing problem is controlled for using the FWER control (van Borkulo et al., 2022). Testing invariant edge strength compares the absolute difference in strength of a specific edge. Invariant global strength assumes the null hypothesis of the overall level connectivity being the same across networks. Overall connectivity is defined as the weighted absolute sum of all edges in the network. It is worth

noting that no difference in global strength does not necessarily mean that the networks are similar (van Borkulo et al., 2022).

For all network comparisons we used 1000 iterations (permutations) to create a reference distribution (van Borkulo, 2018). The Network comparison was conducted on the networks shown in Figure 4, not including the product and brand characteristics.

**Table S1**

*Network Comparisons*

| Country comparison | Global strength invariance |                 | Network invariance |                 |
|--------------------|----------------------------|-----------------|--------------------|-----------------|
|                    | <i>S</i>                   | <i>p</i> -value | <i>M</i>           | <i>p</i> -value |
| DE - FR            | 0.45                       | .55             | <b>0.26</b>        | <b>.02</b>      |
| DE - NL            | 1.13                       | .06             | 0.16               | .29             |
| DE - UK            | <b>1.11</b>                | <b>.01</b>      | 0.22               | .1              |
| FR - NL            | 0.68                       | .27             | <b>0.28</b>        | <b>&gt;.001</b> |
| FR - UK            | 0.66                       | .14             | <b>0.29</b>        | <b>.01</b>      |
| NL - UK            | 0.021                      | .97             | <b>0.28</b>        | <b>.01</b>      |

Testing the invariance of global strength suggests that the overall connectivity of the networks is not significantly different across countries. The exception is a difference between Germany and the UK, with the German network showing higher connectivity (8.82) than the UK network (7.71). The network invariance test revealed at least one of the edges to be different between most networks (the exceptions being between the German and Dutch networks and between the German and UK networks).