

## welcome

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Dear participant,

You are invited to participate in a study titled 'Opinions about reusable packaging design for hand soap.' This study is conducted by Xueqing Miao from TU Delft.

This study aims to investigate your evaluation and behavioural intentions towards reusable packaging. We will ask you to read a textual scenario and look at packaging images, then answer several questions. It will take you approximately 5 minutes to complete this survey.

As with any online activity, the risk of a breach is always possible. To the best of our ability, your answers in this study will remain confidential. We will minimise any risks by not asking for your identifiable information. All data collected in the survey will be anonymised and archived in the TU Delft repository for further research. Please notice that we may publish anonymised data as open sources for future research publications.

Your participation in this study is entirely voluntary. You can withdraw at any time. If you have any concerns or questions, please don't hesitate to contact the researcher.

Thank you for your cooperation!

Xueqing Miao

PhD researcher on Sustainable Consumer Behaviour,

Industrial Design Engineering, TU Delft

[X.Miao@tudelft.nl](mailto:X.Miao@tudelft.nl)

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Based on the statement above, I herewith declare my participation in this research

- ☐ Yes, I consent
- ☐ No, I do not want to participate in this survey
- 

Please fill in your unique Prolific ID in the box below.

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## condition 1: without patterns - new packaging

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Please immerse yourself in the following scenario:

Imagine you want to buy some hand soap at the supermarket. As you approach your preferred brand, you notice something new:

**The hand soap is now available in reusable packaging.**

To use it, you'll pay a small deposit that is fully refundable once you return the empty packaging. The packaging is then professionally cleaned and refilled to be sold to the future consumer, with strict hygiene standards. However, due to having been reused multiple times, all reusable packaging available on the shelf may have signs of wear and tear.

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**You pick up one reusable packaging (pictured below).**

Please take some time to carefully evaluate this packaging according to its appearance. After, you will answer some questions regarding your thoughts.





○ ○ ○ ○ ○ ○ ○

○ ○ ○ ○ ○ ○ ○

### How do you evaluate the appearance of this reusable packaging?

○ ○ ○ ○ ○ ○ ○

## Appealing

○ ○ ○ ○ ○ ○ ○

Perfect

○ ○ ○ ○ ○ ○ ○

Good looking

○ ○ ○ ○ ○ ○ ○

Very aesthetically pleasing

○ ○ ○ ○ ○ ○ ○

Attractive



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Based on the picture and description of this reusable packaging of hand soap,  
I feel this reusable packaging...

Is not at all contaminated

☐ ☐ ☐ ☐ ☐ ☐ ☐

Is very contaminated

Is not at all unsanitary

☐ ☐ ☐ ☐ ☐ ☐ ☐

Is very unsanitary

○ ○ ○ ○ ○ ○ ○

Was definitely touched by  
other people

○ ○ ○ ○ ○ ○ ○

Is very dirty

Assuming that the quality and price of the product are satisfying,  
please indicate how much you agree with each of the following statement.

○ ○ ○ ○ ○ ○ ○

○ ○ ○ ○ ○ ○ ○

Please indicate how much you agree with each of the following statement.

○ ○ ○ ○ ○ ○ ○

○ ○ ○ ○ ○ ○ ○

○ ○ ○ ○ ○ ○ ○



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**Are you familiar with this brand of hand soap?**

☐ Yes

☐ No

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**condition 2: with patterns - new packaging**

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Please immerse yourself in the following scenario:

Imagine you want to buy some hand soap at the supermarket. As you approach your preferred brand, you notice something new:

**The hand soap is now available in reusable packaging.**

To use it, you'll pay a small deposit that is fully refundable once you return the empty packaging. The packaging is then professionally cleaned and refilled to be sold to the future consumer, with strict hygiene standards. However, due to having been reused multiple times, all reusable packaging available on the shelf may have signs of wear and tear.

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**You pick up one reusable packaging (pictured below).**

Please take some time to carefully evaluate this packaging according to its appearance. After, you will answer some questions regarding your thoughts.



  
**Foamy**  
100% natural  
hand soap

**Eucalyptus  
and Rosemary**  
for clean  
and soft hands



Get some  
more out

the bottle  
is made of  
recycled paper

The packaging  
is made of  
recycled paper

It is made of  
recycled paper  
and is 100%  
recyclable

Positive

Like

Good





Based on the picture and description of this reusable packaging of hand soap,  
I feel this reusable packaging...

Is not at all unsanitary

☐ ☐ ☐ ☐ ☐ ☐ ☐

Is very unsanitary

Was definitely not touched by  
other people

☐ ☐ ☐ ☐ ☐ ☐ ☐

Was definitely touched by  
other people

○ ○ ○ ○ ○ ○ ○

○ ○ ○ ○ ○ ○ ○

○ ○ ○ ○ ○ ○ ○

○ ○ ○ ○ ○ ○ ○

○ ○ ○ ○ ○ ○ ○

○ ○ ○ ○ ○ ○ ○

○ ○ ○ ○ ○ ○ ○

Noticeable

## Striking

**Are you familiar with this brand of hand soap?**

☐ Yes

☐ No

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**condition 3: without patterns - scratched packaging**

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Please immerse yourself in the following scenario:

Imagine you want to buy some hand soap at the supermarket. As you approach your preferred brand, you notice something new:

**The hand soap is now available in reusable packaging.**

To use it, you'll pay a small deposit that is fully refundable once you return the empty packaging. The packaging is then professionally cleaned and refilled to be sold to the future consumer, with strict hygiene standards. However, due to having been reused multiple times, all reusable packaging available on the shelf may have signs of wear and tear.

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**You pick up one reusable packaging (pictured below).**

Please take some time to carefully evaluate this packaging according to its appearance. After, you will answer some questions regarding your thoughts.






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How do you evaluate this reusable packaging of hand soap in general?

Dislike	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Like
Negative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Positive
Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Good
Unfavourable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Favourable
Undesirable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Desirable

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How do you evaluate the appearance of this reusable packaging?

Not very aesthetically pleasing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very aesthetically pleasing
Unattractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Attractive
Flawed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Perfect
Bad looking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Good looking
Unappealing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Appealing



Based on the picture and description of this reusable packaging of hand soap, I feel this reusable packaging...

Is not at all dirty ○ ○ ○ ○ ○ ○ ○ Is very dirty

Was definitely not touched by other people ○ ○ ○ ○ ○ ○ ○ Was definitely touched by other people

Is not at all contaminated ○ ○ ○ ○ ○ ○ ○ Is very contaminated

Is not at all unsanitary ○ ○ ○ ○ ○ ○ ○ Is very unsanitary

Assuming that the quality and price of the product are satisfying, please indicate how much you agree with each of the following statement.

[illegible]

Please indicate how much you agree with each of the following statement.

[illegible]



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Based on the picture with details, the signs of wear and tear on this reusable packaging are...

Unnoticeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Noticeable
Subtle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Striking
Hidden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Evident

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Are you familiar with this brand of hand soap?

☐ Yes

#### condition 4: with patterns - scratched packaging

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Please immerse yourself in the following scenario:

Imagine you want to buy some hand soap at the supermarket. As you approach your preferred brand, you notice something new:

**The hand soap is now available in reusable packaging.**

To use it, you'll pay a small deposit that is fully refundable once you return the empty packaging. The packaging is then professionally cleaned and refilled to be sold to the future consumer, with strict hygiene standards. However, due to having been reused multiple times, all reusable packaging available on the shelf may have signs of wear and tear.

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**You pick up one reusable packaging (pictured below).**

Please take some time to carefully evaluate this packaging according to its appearance. After, you will answer some questions regarding your thoughts.





How do you evaluate the appearance of this reusable packaging?

Bad looking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Good looking
Unattractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Attractive
Not very aesthetically pleasing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very aesthetically pleasing
Unappealing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Appealing
Flawed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Perfect



Based on the picture and description of this reusable packaging of hand soap, I feel this reusable packaging...

Is not at all contaminated ○ ○ ○ ○ ○ ○ ○ Is very contaminated

Is not at all dirty ○ ○ ○ ○ ○ ○ ○ Is very dirty

Is not at all unsanitary ○ ○ ○ ○ ○ ○ ○ Is very unsanitary

Was definitely not touched by other people ○ ○ ○ ○ ○ ○ ○ Was definitely touched by other people

Assuming that the quality and price of the product are satisfying,  
please indicate how much you agree with each of the following statement.

[illegible]

Please indicate how much you agree with each of the following statement.

[illegible]



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Based on the picture with details, the signs of wear and tear on this reusable packaging are...

Unnoticeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Noticeable
Subtle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Striking
Hidden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Evident

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Are you familiar with this brand of hand soap?

☐ Yes

☐ No

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### individual differences (common)

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**Thank you for your opinions about this reusable packaging!**

**Before we close, we would like to ask a few last questions about you.**

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**Please indicate to what extent you reuse packaging in other domains.**

	Never	Rarely	Occasionally	Sometimes	Frequently
I avoid using plastic and paper bags at the grocery.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I avoid purchasing drinks in plastic bottles.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I purchase a reusable coffee cup if I forget to bring my own when I buy a takeaway hot drink.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I purchase reusable shopping bags if I forget to bring my own when I do grocery shopping.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wash and refill disposable plastic bottles.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I carry a reusable water bottle every time I leave home.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I avoid purchasing takeaway hot drinks in disposable cups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I bring reusable shopping bags every time I do grocery shopping.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use a reusable coffee cup every time I buy a takeaway hot drink.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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**How disgusting would you find each of the following experiences?**

(If you think something is bad or unpleasant, but not disgusting, you should tick "not disgusting at all")

	Not disgusting at all			Moderately disgusting			Extremely disgusting
Touching toilet in public restroom.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eating chocolate shaped like dog-doo.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking from the glass of an acquaintance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Going to restaurant and cook has cold.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Which gender do you belong to?

- ☐ Male
- ☐ Female
- ☐ Other
- ☐ Prefer not to say

### What is your birth year?

### What is the highest level of education you have completed?

- ☐ Primary school or less
- ☐ Secondary school
- ☐ Post-secondary vocational education (MBO)
- ☐ Bachelor's degree (HBO/WO)
- ☐ Master's degree (HBO/WO)
- ☐ Doctoral degree or more

### Closure

**You have finished all the questions! You can click next and close the survey.**

Feel free to leave additional thoughts or comments about this study in the box below. If you

have any questions, welcome to contact [X.Miao@tudelft.nl](mailto:X.Miao@tudelft.nl)

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