

BIOTEXFUTURE

TRANSITIONLAB INSIGHTS SESSION 2

HOW TO COMMUNICATE SUSTAINABILITY INFORMATION:
COMPARING DIGITALIZED AND CONVENTIONAL FORMATS

BENEDIKT BRAND



Consumers report to buy sustainable products



Sustainable products are **actually** bought substantially **less often** than consumer reports suggest

Intention-Behavior Gap

(Carrington et al. 2014)



One of the main reasons identified by literature: **lack of information**
(Davies et al. 2012, 45; McNeill und Moore 2015, 219; Wiederhold und Martinez 2018, 424)

However: is it really a lack of information or just how information is presented (i.e., the format of providing information; see Goodarzi et al. 2021)?

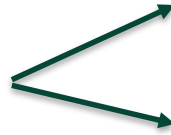
RQ1: To what extent do sustainability information provided by *QR-codes* improve the *product evaluation* of clothing compared with conventional information on the product label?

RQ2: To what extent do sustainability information provided by *QR-codes* increase the *purchase intention* of clothing compared with conventional information on the product label?

3 METHOD

CONCEPTUALIZATION

Between-subjects experimental design



Control group: Sustainability information on *conventional product labels*

Experimental group: Sustainability information *obtained via QR-code*

- **Procedure:**



- **Sampling:** Student sample from a mid-sized city (in Germany)

- **Product:** generic, white basic t-shirt

- High generalizability
- Including price tag → Increasing closeness to reality + based on the mean price of the largest clothing retailers
- Without brand → Preventing bias + scenario: within favorite shop (→ offers preferred brands)

3 METHOD

SCENARIO AND LABORATORY EXPERIMENT

You are currently considering to potentially buy a **white basic t-shirt** once again.

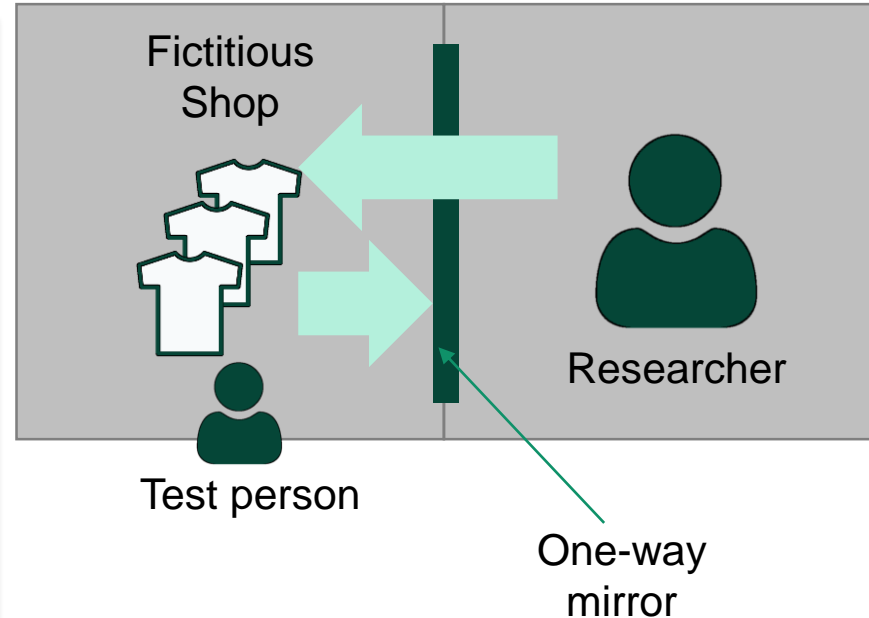
Searching for this t-shirt, you are visiting your local favorite apparel store.

Please imagine that the room in front of you is a department in **your favorite apparel store**, in which the t-shirts are exhibited.

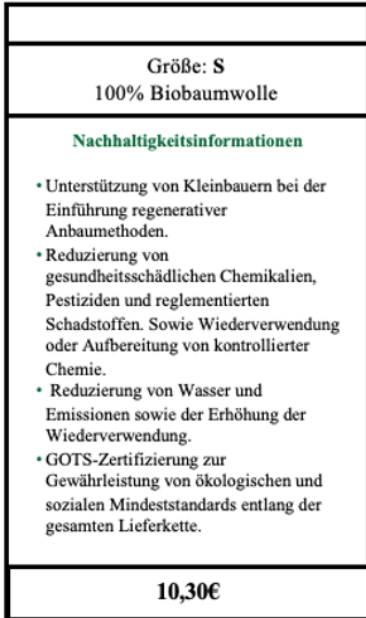
I would like to ask you to inform yourself about the exhibited t-shirts to that extent that you can decide in favor for or against a purchase.

You can also make use of the changing room in the corner on the left.

After having made the decision, please leave the room.



3 METHOD STIMULUS



→ Size

→ Material

→ Sustainability information:

- Supporting manufacturers in introducing regenerative methods of cultivation.
- Reducing harmful chemicals, pesticides, and pollutants, as well as re-using and processing of controlled chemical products.
- Reducing the water use and emissions, as well as increasing the amount of re-usage.
- GOTS certification for ensuring minimum levels of ecological and social standards along the entire value chain.

Source: Own illustration



4 RESULTS

n=122 test persons → Data cleansing: n=114 (n=8 did not scan the QR-code)

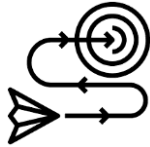
| | Group | | U, p-value | Effect size |
|--------------------|-----------------------------|-----------------------------|-----------------------------|-------------|
| | Control group | Experimental group | | |
| | M_{rank} (n=61) | M_{rank} (n=51) | | |
| Product evaluation | 46.08 | 70.64 | U=920; p=.001 | r=.29 |
| Purchase intention | 47.68 | 68.80 | U=1017; p<.001 | r=.32 |

Findings

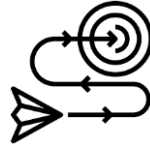
The sustainable t-shirt is evaluated more positive by the experimental group than by the control group.

The purchase intention for the sustainable t-shirt is increased for the experimental group compared with the control group.

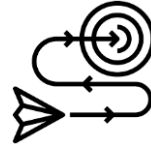
RESULTS



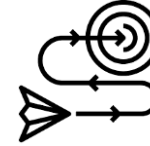
Consumers evaluate sustainable textiles significantly better if sustainability information is provided by a video instead of textual information.



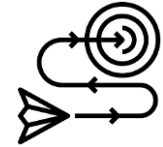
Consumer willingly scan QR codes to uncover additional sustainability information about textiles (87%).



Consumers express an increased purchase intentions if sustainability information are provided by a video instead of textual information.



Improved product evaluation and increased purchase intention both for male and female consumers (however, slightly weaker effects).



Improved product evaluation and increased purchase intention both for more and less innovative consumers.

IMPLICATIONS

Implement QR codes linking to (product) videos for textiles, which explain the **sustainability information** in a **more appropriate format**.

To enable the potential of **digitalized information** (like in online shops) in physical stores, QR codes should be attached to all textiles (and sustainable articles in particular). This way, **videos and additional information** can be provided to consumers.

To **increase sales** of sustainable textile, sustainability information should be provided by videos (related to QR codes).

Implement QR codes for sustainability information both **for men and women** apparel.

- Carrington, M.J., Neville, B.A., Whitwell, G.J., 2010. Why Ethical Consumers Don't Walk Their Talk: Towards a Framework for Understanding the Gap Between the Ethical Purchase Intentions and Actual Buying Behaviour of Ethically Minded Consumers. *Journal of Business Ethics*, 97 (1), 139–158. 10.1007/s10551-010-0501-6.
- Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management science*, 32(5), 554-571.
- Davies, Iain A., Zoo Lee und Ine Ahonkhai (2012), „Do Consumers Care About Ethical-Luxury”, *Journal of Business Ethics*, 106, 37-51.
- McNeill, Lisa und Rebecca Moore (2015), „Sustainable fashion consumption and the fast fashion conundrum: fashionable consumers and attitudes to sustainability in clothing choice”, *International Journal of Consumer Studies*, 39, 212-222.
- Reichwald, R., Möslein, K., Sachenbacher, H., & Englberger, H. (2013). *Telekooperation: Verteilte Arbeits-und Organisationsformen*. Springer-Verlag.
- Trope, Yaacov, Nira Liberman und Wakslak Cheryl (2007), „Construal Levels and Psychological Distance: Effects on Representation, Prediction, Evaluation, and Behavior”, *Journal of Consumer Psychology*, 17(2), 83-95.
- Wang, S., Hurlstone, M. J., Leviston, Z., Walker, I., & Lawrence, C. (2021). Construal-level theory and psychological distancing: Implications for grand environmental challenges. *One Earth*, 4(4), 482-486.
- Wiederhold, Marie und Luis F. Martinez (2018), „Ethical consumer behaviour in Germany: The attitude-behaviour gap in the green apparel industry”, *International Journal of Consumer Studies*, 42, 419-429.