



University of Zurich
Social and Business Psychology

About consumer's difficulties in evaluating the environmentally-friendliness of consumer products

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A consumer is in a store and willing to make environmentally-friendly purchases.

4. Which product characteristics are indicative for more or less environmental harmful effect?

---> LCA

6. How do consumers arrive to an environmental judgment of a product?

---> Psychology

Environmentally significant dimensions of food products (Jungbluth, 2000)

Environmentally significant dimensions	Values
1. <i>Agricultural practice</i>	e.g., organically vs. conventionally grown
2. <i>Origin</i>	e.g., from local area vs. imported from foreign countries
3. <i>Packaging</i>	e.g., unpacked vs. packed
4. <i>Conservation</i>	e.g., fresh vs. frozen

Barriers that hinder consumers to make environmentally „correct“ judgments:

- When people have to deal with multiple dimensions, they have a tendency to focus only on **very few dimensions**, while ignoring others. This is even more likely when people are under **time pressure**. --- E.g., consumers rely only on agricultural production method („Bio“) when evaluating product's environmental quality.
 - Other barriers are related to the fact that people include information that have **nothing to do** with product characteristics (e.g., mood, feelings, role models, image).
- ➔ People's preferences and judgments are highly **context-dependent** and **unstable**.

Differentiation between two types of situations

1. Separate evaluation mode

3. Joint evaluation mode

1. Separate evaluation mode

Situations in which a consumer needs to evaluate the environmental quality of a specific product **by itself**.



Is that Product C environmentally-friendly or not?

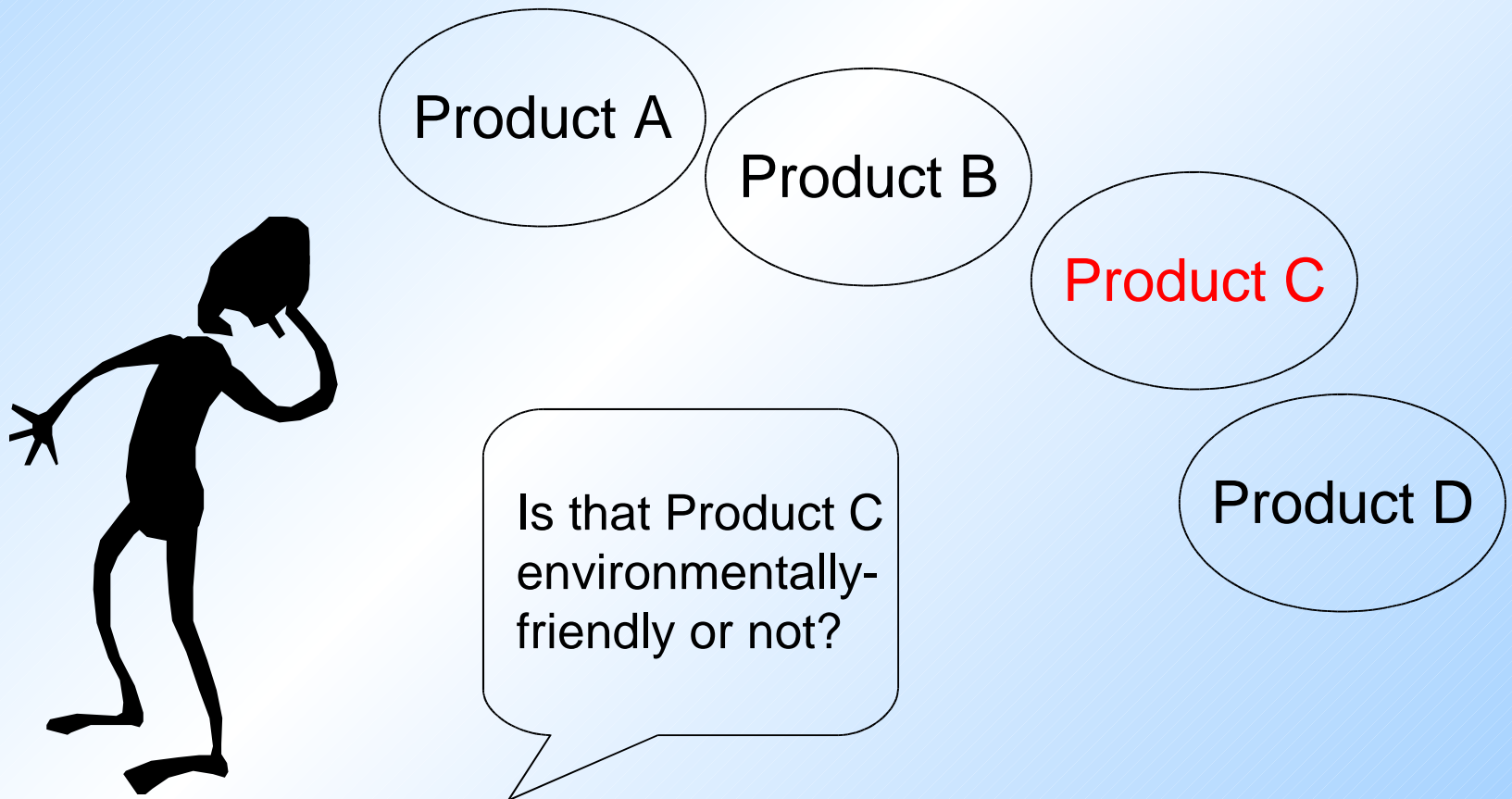
Product C

1. Separate evaluation mode

- When evaluating an option **separately**, people make **comparisons** between the given product and some sort of positive or negative **standard/reference** against which the product is evaluated.
- Such a **reference** is retrieved from **memory**.
- A standard can have many forms, but often some sort of internalized „norms“ how something „**should be**“ or „**should not be**“.

2. Joint evaluation mode

Situations in which a consumer has to evaluate a specific product **within** a set of several other alternatives.



2. Joint evaluation mode

- When evaluating **one product in the context of others**, people rely less on the original reference but focus more **on the alternatives available in the setting**.
- ➔ These different kinds of situations have an effect on consumer's product evaluations.

Psychological Studies: Main Goals

Several research studies were conducted designed to explore...

3. How environmental judgments vary in **separate** and **joint evaluation** situations.
4. Whether people's (**subjective**) evaluations deviate from LCA (**objective**) estimates about which products are environmentally advantageous or disadvantageous.

Advantage of interdisciplinary collaboration

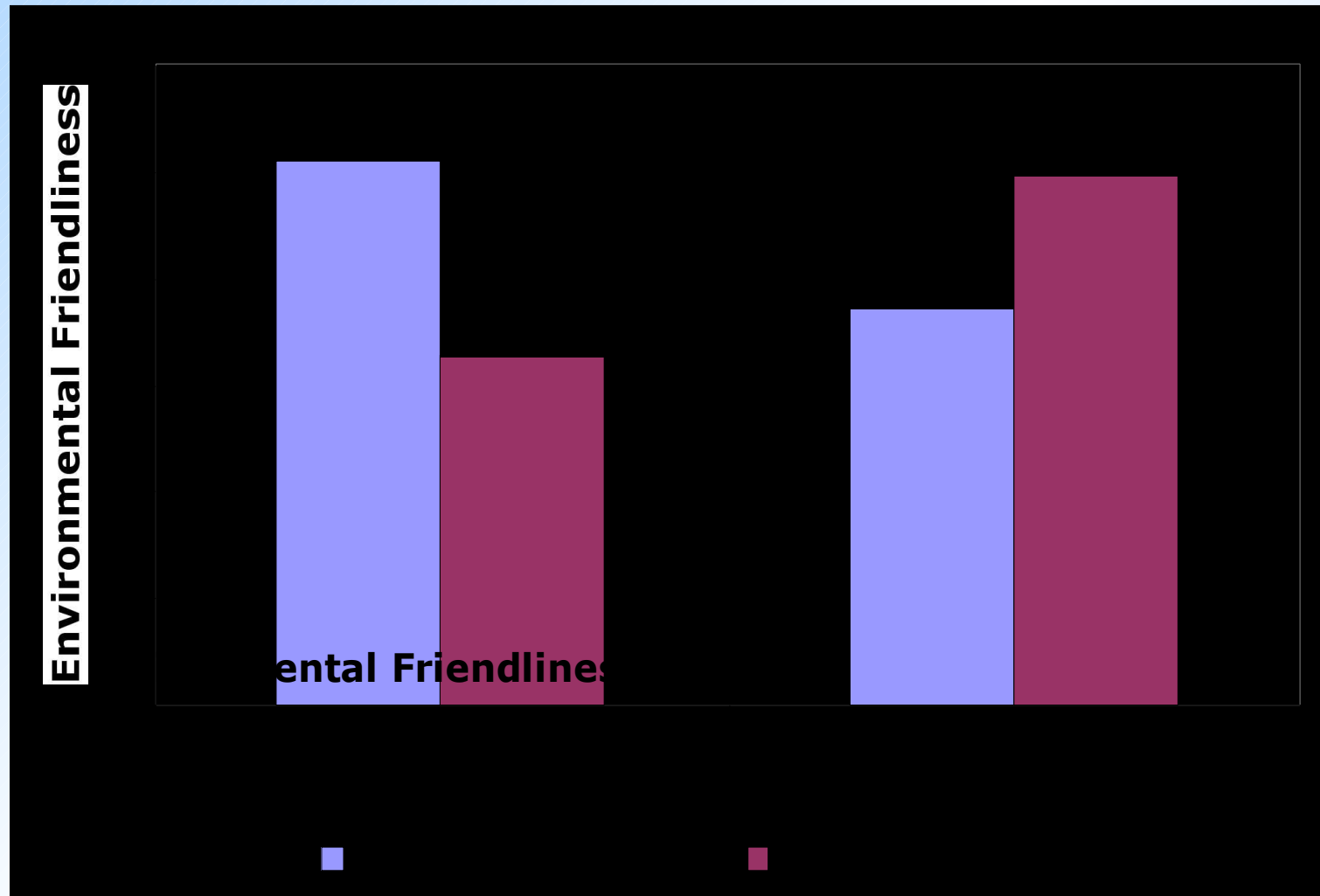
Due to collaboration with LCA...

- We could provide people with relevant **knowledge** about the environmentally significant product dimensions.
 - *Agricultural practice, origin, packaging, conservation*
- We could provide people with information about environmentally *best* or *worst* food product examples (= **references**)
 - positive reference: e.g., product that is organic, fresh, not wrapped, from local area.
 - negative reference: e.g., product produced greenhouse, frozen, wrapped, imported from foreign countries.
- We could **rank** food products in terms of their environmental harmfulness (objective ranking).

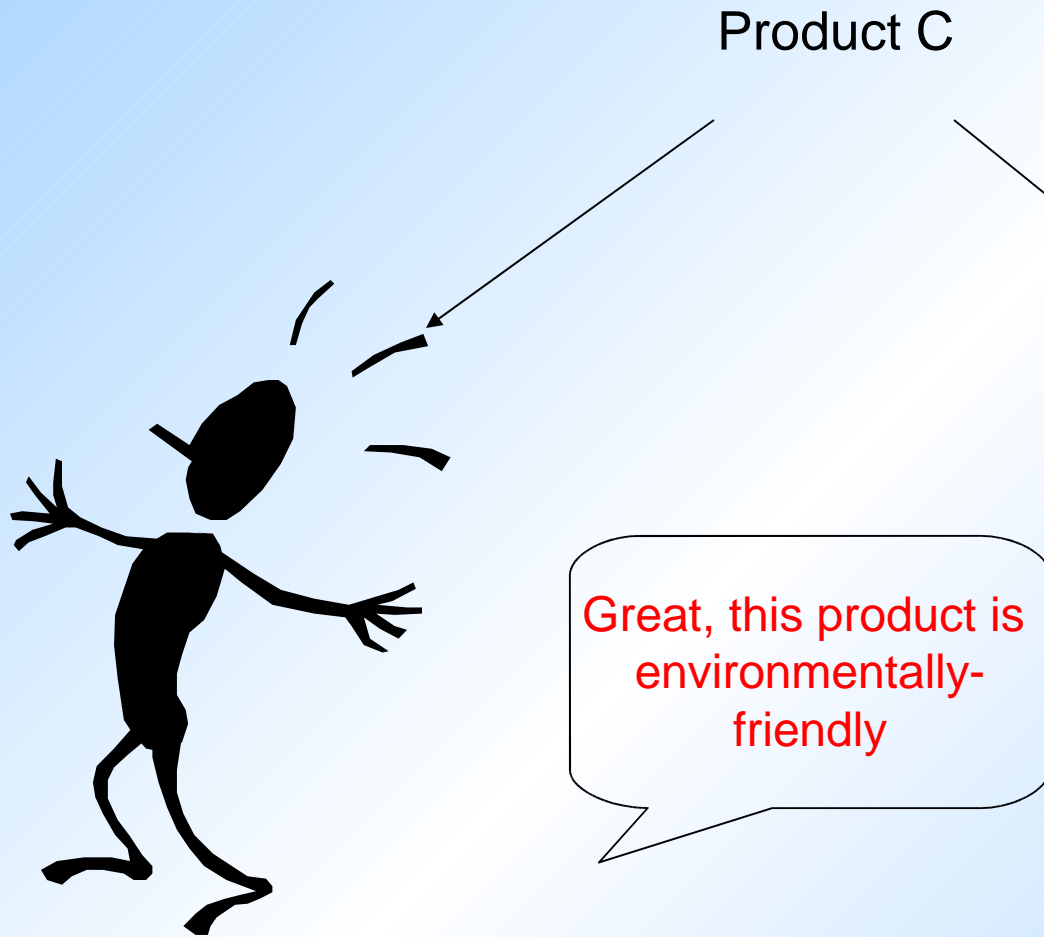
Psychological Studies: General Procedure

- People were **informed which product characteristics** are environmentally significant.
- Information about **positive** and **negative product standards** was explicitly given.
- People's task was to **evaluate the environmentally-friendliness** of a variety of food products from several product categories .
- Study 1: Examined the effect of Separate evaluation
- Study 2: Examined the effect of Joint evaluation.
- Study 3: Examined divergence between subjective vs. objective evaluations.

Main results of Study 1 and 2

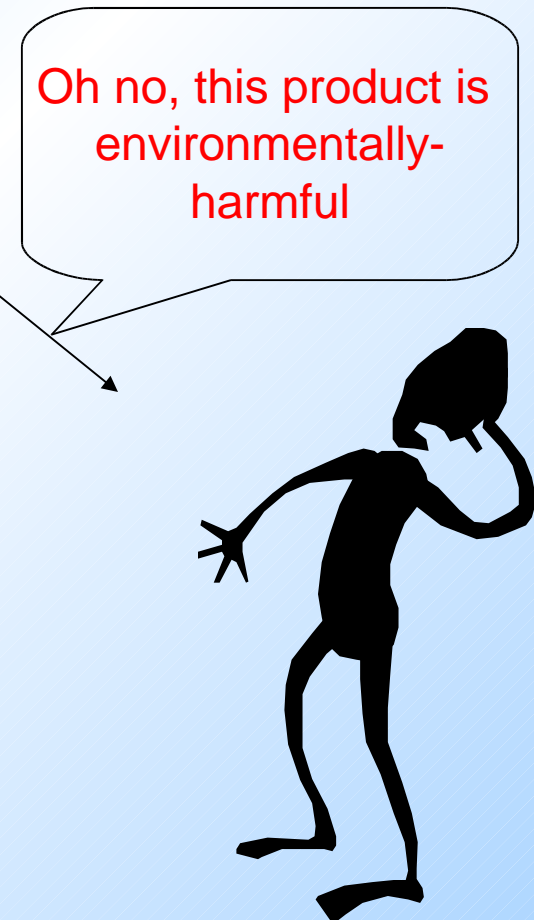


Separate evaluation



Negative Reference

Joint evaluation



Negative Reference

Separate evaluation

Product C



Positive Reference

Oh no, this product is environmentally-harmful

Joint evaluation

Great, this product is environmentally-friendly



Positive Reference

Main results of Study 3: Divergence between „objective“ vs. „subjective“ evaluations

a) **Rank order** of products according to LCA

Product B < Product C < Product D
—————→
Increasing extent of harmful environmental impact

b) **Subjective order** of products regarding environmental harmfulness was compared with objective order

$$\text{Proportion of Errors (PE)} = \frac{\text{Wrong judgment}}{\text{Wrong} + \text{Correct judgments}} = .51$$

Summary of Main Findings

- The **same product** looks sometimes more environmentally-friendly, and sometimes more environmentally-harmful. -- Underscores how **unstable** environmental judgments are.
- People arrive sometimes at **wrong conclusions** about the product's environmental friendliness. -- They erroneously think that a product is environmentally-friendly while it isn't (and vice versa).

Final Remarks

- People's "**mistakes**" are not a problem of **lack of knowledge**. Rather, they are the result of **human information processing patterns** that lead people to translate environmental knowledge in a manner that is inconsistent with LCA-evaluations.
- Providing people with **information** about environmentally significant dimensions **is not enough** to support sustainable consumption. – It does not remove the „**gap**“ between knowledge and behavior.
- Important barriers responsible for the gap are related to the way **how people process information** and how they are influenced by **contextual factors**. They lead to the fact that judgment and decision making is highly **context-dependent** and **unstable**.
- How to support sustainable consumption patterns? -> **Integration** of environmentally significant information, e.g., in one **product label**.