

Sustainability labels for food products:

A literature review on consumer's behavior, challenges, and opportunities

Roberto Villalba (roberto.villalba@uni-hohenheim.de), Regina Birner.

BACKGROUND

- **Sustainability labels (SL)** first burst between the 1980s and the 1990s, as a method to increase transparency along the food chain and provide consumers with information in order to encourage sustainable consumption (Schader, et al., 2014).
- A proliferation of SL has occurred, counting nowadays with around **465 ecolabels** registered, of which **148** belong to the **food sector**.
- The different approaches to sustainability and the recent boost of labels might be generating **confusion for consumers**, which affect their final decision to use SL.

OBJECTIVE AND METHODOLOGY

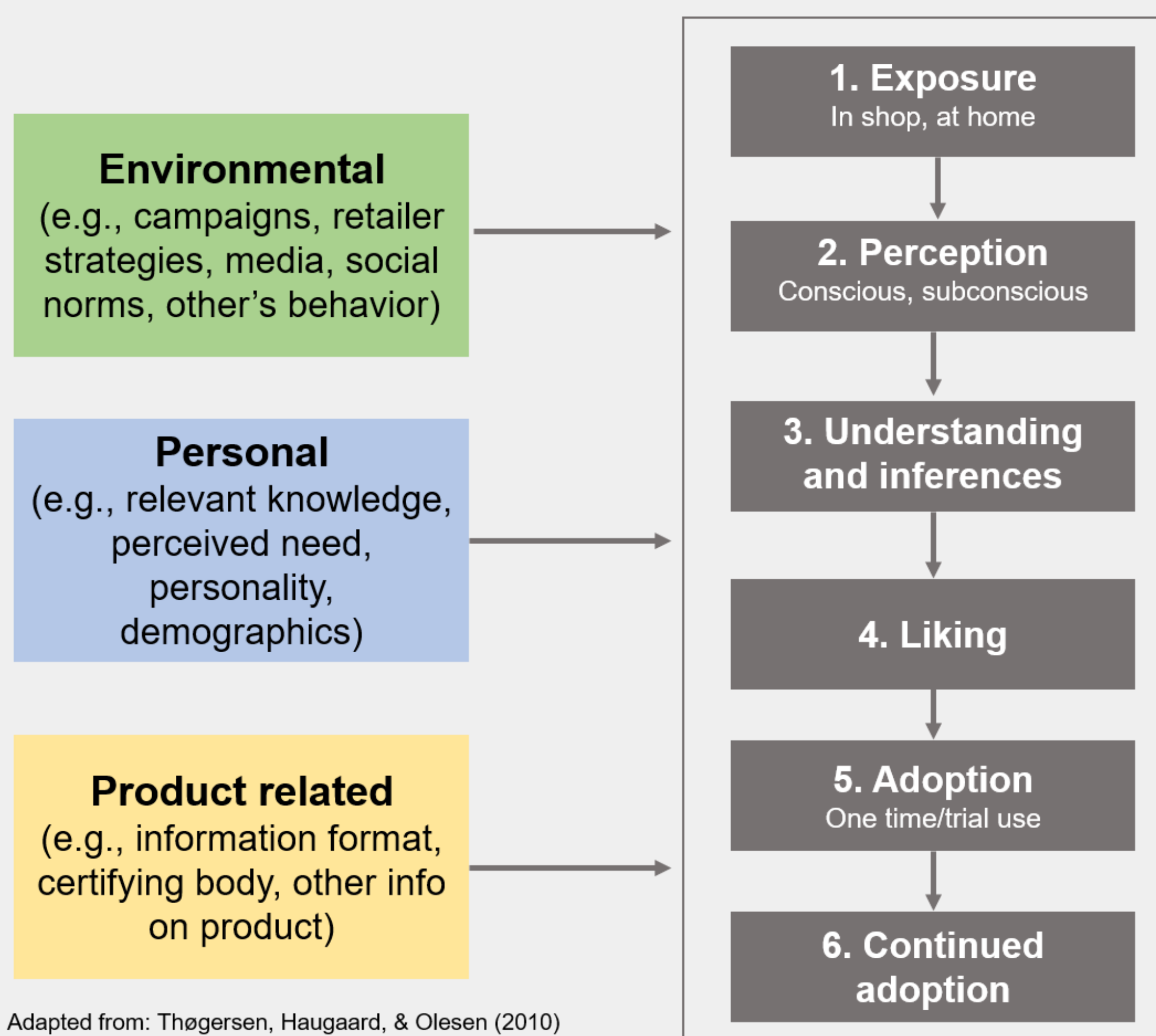
To analyze how consumers behave towards sustainability labels from an **economic approach** and to identify which are the factors that influence consumers decisions.

The study was based on a **literature review**, which included academic papers, reports by international institutions, and international indexes.

RESULTS

- In agriculture, sustainability needs to be understood as a **multidimensional concept**, with an **environmental dimension** (whether trade-offs between present and future needs enable the agricultural activity to be sustainable over time), and an **ethical dimension** (related to trade-offs between consumers and other subsumed stakeholders).
- Literature suggests that most SL have their **own approach** about sustainability and usually just prioritize one of the dimensions to promote sustainable consumption.

Factors that influence consumer's use of SL



CHALLENGES

- 1) The proliferation of sustainability labels appears to create **confusion among consumers**.
- 2) There is a **high amount of information** on food packages among which consumers have to decide. Sustainability labels face a big competition with information about price, nutrition, ingredients, etc.

Self-reported use of food label information by consumers

When buying food and drink products, how often do you look for the following information on the packaging?

Label Information	Mean
1 Price	6.09
2 Best before/use by date	5.94
3 Quantity/size of product	5.23
4 Brand	4.73
5 Ingredients list	4.32
6 Nutritional benefits	4.12
7 Cooking instructions	4.08
8 Nutrition information	4
9 Country of origin	3.98
10 Portion information	3.65
11 Health benefits	3.63
12 Health logo/symbol	3.23
13 Organic status	3.17
14 Environmental impact (e.g. production, transport)	2.98
15 Ethical impact (e.g. working conditions, fair trade)	2.97
16 Allergy information	2.75

1 = "Never" and 7 = "Always"
Adapted from Grunert et al. (2014).

- 3) The **lack of a common framework** for sustainability labels makes it difficult to compare their impact, monitoring and evaluation systems.

OPPORTUNITIES

A standardized label that summarizes how sustainable the product is?

Tomato organic (Switzerland) + 37 SP *					Salmon cooled (Argentina) - 17 SP *				
Production	Origin	Packaging	Conservation	Consumption	Production	Origin	Packaging	Conservation	Consumption
+43	+45	+17	+41	+18	-39	-48	+7	+26	+11

Approved by the Federal Institute of Sustainability

Adapted from: Engels et al. (2010)

CONCLUSIONS

- Most consumers relate Sustainability Labels only to an **environmental dimension**, and neglect the ethical dimension.
- The availability of SL can be said to foster consumers' use only when they have a **clear motivation** and **understanding** about what sustainability means and how it affects the production process of a specific food product.
- The implementation of a standardized label would also face important challenges such as the variation between the farm production systems and its implementation by different certifiers.

Selected references:

Engels, S. V., Hansmann, R., & Scholz, R. W. (2010). Toward a sustainability label for food products: an analysis of experts' and consumers' acceptance. *Ecology of Food and Nutrition*, 49(1), 30–60

Grunert, K. G., Hieke, S., & Wills, J. (2014). Sustainability labels on food products: Consumer motivation, understanding and use. *Food Policy*, 44, 177–189.

Schader, C., Grenz, J., Meier, M. S., & Stolze, M. (2014). Scope and precision of sustainability assessment approaches to food systems. *Ecology and Society*, 19(3)