

Design and Validation of Educational Resources for Household Sustainable Consumption

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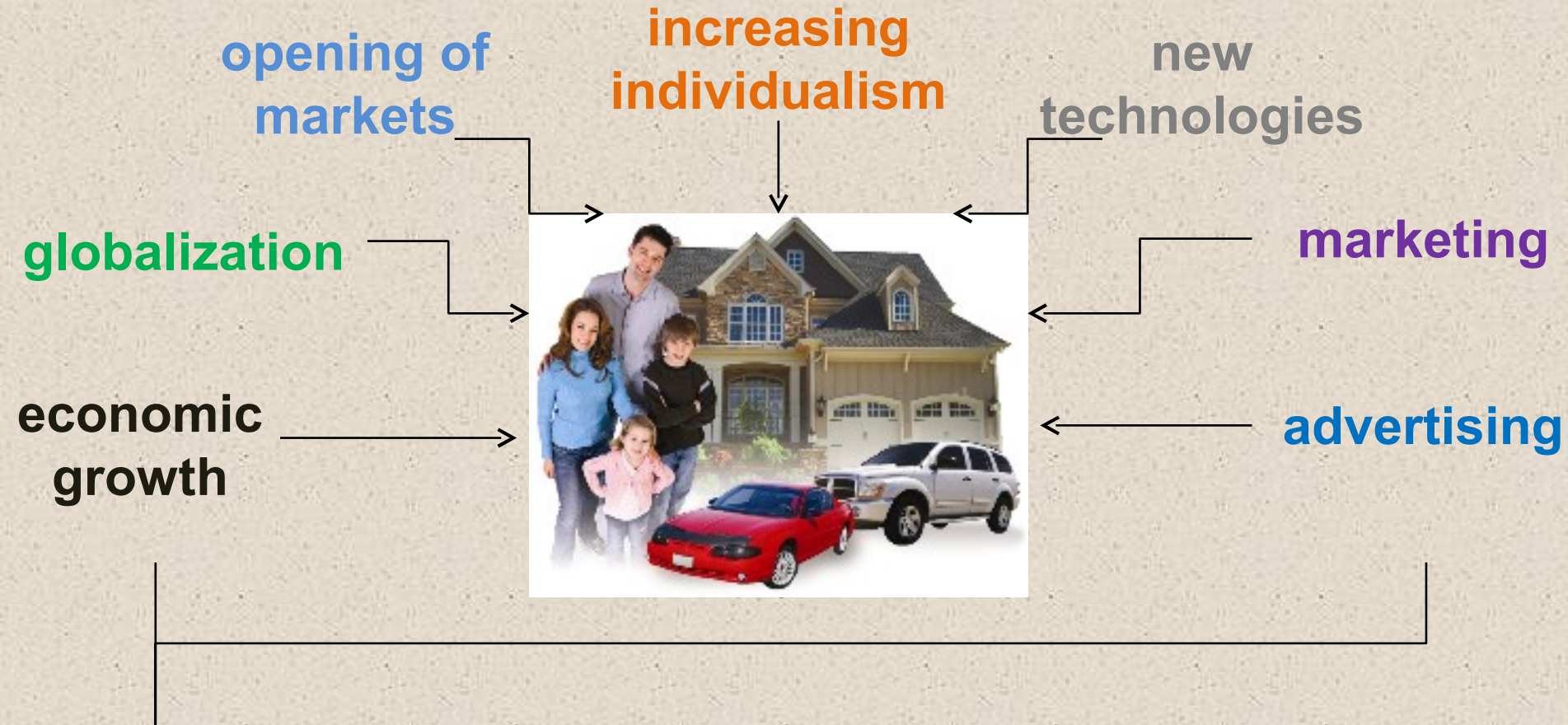
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1. INTRODUCTION AND AIMS



Have led to families to exceed goods and services consumption standards.

1. INTRODUCTION AND AIMS



Food and drink
consumption

Housing

Personal travel
and mobility

Tourism

Integrative domains of Household Sustainable Consumption

1. INTRODUCTION AND AIMS

goods and services
live and work
housing
manage waste
vacation spots
many others



Affect community's sustainability

It is important that families are aware and informed to make more sustainable choices

1. INTRODUCTION AND AIMS

1

The first objective of this work is to assess the quality of educational resources on household sustainable consumption. Portuguese resources available in the internet were used as a case study;

2

A second objective is to propose a set of conditioning factors and key areas for development and validation of household sustainable consumption educational resources.

2. METHODOLOGY

To fulfill these aims a methodological approach was developed, integrating the following steps:

- 1) Web search and selection of online resources developed in Portugal for household sustainable consumption (criteria: households/families as target, cover at least 3 domains of the HSC, sustainable consumption as scope);
- 2) Development of a checklist of scientific and technical, communication, educational, value and attitude criteria to evaluate the selected resource set;

2. METHODOLOGY

- 3) Content evaluation of the resources conducted by an expert panel with experience and knowledge in the area, based upon the defined criteria;
- 4) Explore the conditioning factors and key areas for the development and validation of household sustainable consumption educational resources.

2. METHODOLOGY: CRITERIA CHECKLIST

Selected criteria for the evaluation grid of the educational resources (scored 1 to 5):

SCIENTIFIC
AND
TECHNICAL

EDUCATIONAL

COMMUNICATION

VALUES AND
ATTITUDES

2. METHODOLOGY: CRITERIA CHECKLIST

Scientific and technical criteria

- Scientific accuracy
- Adequacy of content to the aim
- Appropriate level of detail
- Cover the main components of sustainability (environment, economic, social, cultural and ethical)
- Cover the major areas of sustainable consumption: food and drink consumption, housing, travel and personal mobility and tourism
- Cover the national geography

Communication criteria

- Attractive to target public
- Integration of different formats (text, image, sound, video)
- Good design and graphic organization
- Interactivity
- Use of simplified illustrations, diagrams and messages

2. METHODOLOGY: CRITERIA CHECKLIST

Educational criteria:

- Comprehensive and understandable by households
- Clear and objective language
- No grammatical errors
- Relevance of titles and adequacy with the corresponding sections
- Ease of understanding and practical use
- Coherent and functional organization
- Stimulates the autonomy and creativity
- Ability to motivate and interest the user
- Encourages the use of other sources of information and knowledge
- Updated information
- Appropriate to the daily reality of household

Values and attitudes criteria:

- Transmission of the environmental, economic, social and cultural and ethical values and attitudes, conducting to a proper HSC
- Promote education for sustainable consumption covering all components of sustainability
- Suggestion of best practices for a household sustainable consumption

2. METHODOLOGY: RESOURCES EVALUATED

N.

1	Manual/ guide	One day of sustainable consumption	Citizens consumers	Lipor/deco	http://www.consumosustentavel.org/index.php
2	Manual/ guide	Sustainable Consumption Guide	Community of the municipality of Ferreira do Alentejo	Vasco da Gama – Centro de Estudos e Desenvolvimento do Instituto Politécnico de Beja	http://www.ferreirasustentavel.com/index.php
3	Manual/ guide	Responsible Consumption - Issues, Challenges and Practical Guide for a Sustainable Future	Generally Consumers	CIDAC - Centro de Intervenção para o Desenvolvimento Amílcar Cabral	http://www.cidac.pt/CadernoConsumoResponsible
4	PDF file	What is sustainable consumption?	Citizens in general	Câmara Municipal do Seixal	http://www.cm-seixal.pt/NR/rdonlyres/5
5	CD-ROM	Ecopraça	Youths from 7 to 97 years	Valor Sul	http://www.valorsul.com/ecopraca/index.php
6	Website	Blue Planet: environment and sustainability portal	General public	Planeta Azul	http://www.planetazul.pt/edicoes1/planetaazul
7	Manual/ guide	Citizens and Sustainability	Citizens	Câmara Municipal de Águeda	http://gis.cm-agueda.pt/agenda21/Outros
8	Manual/ guide	Responsible Consumption Guide 2009	Portuguese citizens	Impactus / Sustentare	http://www.impactus.org/pdf/GUIA_fina
9	Website	Sustainable Consumption	Consumers in general	Dolceta	http://www.dolceta.eu/portugal/Mod5/

3. RESULTS AND DISCUSSION

Criteria	Resources evaluation			
	Score	Rel. freq. (%)	Mode	Median
Scientific and technical	1	6	4	4
	2	10		
	3	24		
	4	44		
	5	16		
Communication	1	10	4	3
	2	21		
	3	23		
	4	24		
	5	21		
Educational	1	3	4	4
	2	13		
	3	23		
	4	44		
	5	16		
Values and attitudes	1	13	4	3
	2	13		
	3	27		
	4	33		
	5	15		

The selected online resources were scored on average between 3 and 4 on a scale of 1 to 5, where 1 represents very weak quality and 5 very good quality, but several weaknesses were found in specific criteria.

Although the median is 3 or 4, the deviation from the average value is very high due to the lowest ranking of specific criteria.

3. RESULTS AND DISCUSSION

Main weaknesses found:

- Some of the materials are pretty basic
- Few have households as the target audience
- Do not address the four pillars of sustainability
- Do not address all areas of HSC (e.g. tourism)
- There is lack of interactivity
- Do not stimulate creativity or autonomy
- Do not motivate the user
- Do not encourage the use other sources of information and knowledge
- There is a lack of an integrated vision of environmental, economic, social and cultural and attitude values(especially the latest)
- Were not designed for good communication and understanding of sustainability issues.

3. CONDITIONING ASPECTS FOR HSC EDUCATIONAL RESOURCES DEVELOPMENT

3. KEY AREAS FOR HSC EDUCATIONAL RESOURCES DEVELOPMENT

Integration of sustainably components

Domains of HSC

Values and attitudes

From the checklist of criteria these are key areas to take in to account in the development and validation of educational resources

5. CONCLUSIONS

- ✓ Web education resources about HSC available in Portugal were accessed based on a checklist of criteria and expert evaluation.
- ✓ Apart from the reduced samples found, several weaknesses were found, mainly related to coverage and integration of the main domains and components of HSC and attitude and values change achievement.
- ✓ In future development a separate analysis by family group target (e.g. children, adult, elder) and type of resource (e.g. leaflet, guidelines, video, book) should be conducted.

5. CONCLUSIONS

- ✓ Factors that affect the criteria were highlighted for the development and evaluation HSC educational resources. From the checklist of criteria there are key areas that should have special attention.
- ✓ The criteria and conditioning factors are essential for the development of new educative resources to promote more effectively education for household sustainable consumption.



- ✓ To change households choices and decisions and their impacts in the consumption and production patterns.