Sustainable Consumption in Capability Perspective and Inequality

International Conference on Consumer Research
In Bonn
29-30 September 2014
Equality and Sustainable Consumption in Capability Perspective

1. **The Model of Sustainable Consumption in Capability Perspective**
2. **Data, Questions and Empirical Model**
3. **Empirical Results**
4. **Precariousness and Sustainable Consumption**
   I. **Main Challenges for Consumer Research in the European Union**
   II. **Recommendation for European Policy towards Sustainable Consumption**
Sustainable Consumption in Capability Perspective: The Capability Approach

Conversion factors:
- Environmental
- Social
- Personal
Social context

Preference formation
Social influences

Capability set
Freedom to achieve

Choice

Achieved functionings

Sustainable consumption as achieved functionings
No model for studying this empirically available yet
Sustainable Consumption in Capability Perspective: The Theory of Planned Behavior

- Attitudes
- Social norms
- Perceived behavioral control
- Intentions
- Behavior
Sustainable Consumption in Capability Perspective: The Theoretical Model

**Capability Approach:**
- Conversion factors
- Resources
- (Preference Formation)
- Capability Set
  - Choice
  - Achieved functionings

**Theory of Planned Behavior**
- Social Norms
  - Attitudes
  - Perceived Behavioral Control
    - Intention
    - Behavior
Sustainable Consumption in Capability Perspective: Data

• **Innovation Sample of the German Socio-Economic Panel in 2012**

• **Two behaviors:**
  
  – **Purchase of organic food** \( (N=536) \)
    56.9\% female; \( M_{\text{age}} = 51.02 \text{ years}, SD_{\text{age}} = 18.53 \text{ years} \)
  
  – **Use of public transport or bike for inner-city rides** \( (N=363) \)
    45.6\% female; \( M_{\text{age}} = 52.39 \text{ years}, SD_{\text{age}} = 15.89 \text{ years} \)
Variables I – endogenous variables

**Intention:**
“How often do you intend to [purchase organic food / use public transport & bike for inner-city rides] in the future?”

5-point scale: “no, never” - 5 “yes, very often”

**Self-reported behaviour:**
“How often have you [bought organic food / used public transport / bike for inner city-rides] within the last 3 months?”

5-point scale: 1 “never” - 5 “very often”
Variables II – endogenous variables

Attitude (2 items):
“[Purchasing organic food / Using public trans-port & bike] is a good thing to do.”
“[Purchasing organic food / Using public trans-port & bike] is pleasant.”
5-point scale: 1 “do not agree” - 5 “totally agree”

Perceived freedom of choice:
“How much freedom of choice do you have to
[purchase organic food / use public transport & bike for inner-city rides]?”
5-point scale: 1 “very little” - 5 “very much”
Variables III – exogenous variables

Descriptive Norm:
“Most people who are important to me [purchase organic food / use public transport & bike for inner-city rides].”
5-point scale: 1 “do not agree” - 5 “totally agree”

Resource constraints (2 items):
[Purchasing organic food / Using public transport & bike]
... is financially demanding.
... is costly in terms of time.”
5-point scale: 1 “do not agree” - 5 “totally agree”
Variables IV – exogenous variables

Infrastructure barriers (social conversion factors):
“Purchasing organic food is difficult for me because of the lack of shops that offer such products.”
“Using public transport & bike for inner-city rides is difficult for me because of an insufficient public transport infrastructure.”
5-point scale: 1 “do not agree” - 5 “totally agree”

Health barriers (personal conversion factors):
“Using public transport & bike for inner-city rides is difficult for me because of my health.”
5-point scale: 1 “do not agree” - 5 “totally agree”: 
Sustainable Consumption in Capability Perspective: Empirical Model and Hypotheses

Conversion factors
- Descriptive norm
  - Infrastructure barriers
  - Health barriers (mobility)

Resources
- Financial constraints
- Time constraints

Attitude

Perceived freedom of choice

Intention/Behavior Choice

Torsten Masson & Ortrud Leßmann
Path model I – Purchase of organic food

- **Descriptive norm**
  - Infrastructure barriers
  - Financial constraints

- **Attitude**
  - R² = 0.25

- **Intention**
  - R² = 0.52

- **Perceived freedom of choice**
  - R² = 0.14

Path coefficients:
- Descriptive norm → Attitude: 0.50
- Infrastructure barriers → Attitude: 0.24
- Financial constraints → Attitude: -0.21
- Descriptive norm → Perceived freedom of choice: -0.15
- Infrastructure barriers → Perceived freedom of choice: 0.31
- Financial constraints → Perceived freedom of choice: 0.48
Path model II – Mobility behaviour

Descriptive norm
Infrastructure barriers
Time constraints

Attitude
R² = .14

Perceived freedom of choice
R² = .24

Intention
R² = .39

Coefficients:
- Descriptive norm → Attitude: 0.37
- Infrastructure barriers → Attitude: 0.11
- Time constraints → Attitude: -0.41
- Attitude → Intention: 0.13
- Perceived freedom of choice → Intention: 0.32
Empirical Results – Discrepancy Analysis between Attitudes and Freedom of Choice

score discrepancy analysis
(gap of two score points or more)

• attitudes >> perceived freedom of choice
  – 29.2 % in mobility sample
  – 20.9 % in food sample

• perceived freedom of choice >> attitudes
  – 5 % in mobility sample
  – 5.6 % in food sample
Precariousness and Sustainable Consumption – precariousness as a new category of stratification

- “Precariousness” describes the situation of people in a “zone” (layer) who are
  - Not poor, but threatened of becoming poor
  - Not fully integrated in society, but aiming for it
- Precariousness = economic and social insecurity
- Life-course and household context are important
Precariousness and Sustainable Consumption – indicators of precariousness in our data-base

- Temporary employment
- Possibility to save money on a monthly basis
- (high) Number of jobs in the last ten years
- Unemployment spells in the last ten years
- Probability of unemployment in the next two years
- Part-time employment
- No problems in paying the rent
- Number of friends to entrust one’s key
Precariousness and Purchase of Organic Food - Results

- Preliminary findings show that precariousness affects behaviour of respondents
  - People in a precarious situation buy less organic food than the others with whom they share
    - the environmental concern
    - the age
    - and other characteristics
Sustainable Consumption in Capability Perspective and Inequality

Thank you!

• For more information:
• http://www.soeb.de
  – Berichterstattung zur sozioökonomischen Entwicklung in Deutschland
    reporting on socio-economic development in Germany
• http://www.geneca.ufz.de
• http://ipa.hsu-hh.de/lessmann
What are the main challenges for consumer research in the European Union?

… with regard to sustainable consumption

• Broad conception of sustainable consumption that includes non-market-based pro-environmental behavior (PEB)

• Insert SD-questions into household panel questionnaires such as the German SOEP.
What recommendations do you have for European Policy on Sustainable Consumption?

Take an integrated and targeted approach toward social policy and sustainable consumption.

• For consuming sustainably it is necessary to be able to make plans for the future - precariousness impedes this.

Improve opportunities for sustainable consumption to lower the gap between attitudes and behaviour
Logistic Regressions I – Purchase of organic food (N = 536)

<table>
<thead>
<tr>
<th>Dependent V.</th>
<th>Purchase of organic food</th>
<th>Perceived freedom of choice to purchase organic food</th>
<th>(Perceived) Norm to purchase organic food</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent V.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex (0= male, 1= female)</td>
<td>(+)***</td>
<td>(+)**</td>
<td>n.s.</td>
</tr>
<tr>
<td>Household income (log)</td>
<td>(+)**</td>
<td>(+)***</td>
<td>(+)*</td>
</tr>
<tr>
<td>Education</td>
<td>(+)***</td>
<td>(+)***</td>
<td>n.s.</td>
</tr>
<tr>
<td>Age</td>
<td>(+)*</td>
<td>n.s.</td>
<td>(+)**</td>
</tr>
<tr>
<td>Children in HH (0= no, 1= yes)</td>
<td>(+)*</td>
<td>(+)**</td>
<td>n.s.</td>
</tr>
<tr>
<td>Migration (0= no, 1= yes)</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Single HH (0= no, 1= yes)</td>
<td>(+)*</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01; *** p < .001
### Logistic Regressions II – Mobility behaviour (N = 363)

<table>
<thead>
<tr>
<th>Independent V.</th>
<th>Dependent V.</th>
<th>Use of public transport &amp; bike</th>
<th>Perceived freedom of choice to use public transport &amp; bike</th>
<th>(Perceived) Norm to use public transport &amp; bike</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (0= male, 1= female)</td>
<td>Use of public transport &amp; bike</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Household income (log)</td>
<td>(-)*</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>n.s.</td>
<td>n.s.</td>
<td>(+)**</td>
</tr>
<tr>
<td>Children in HH (0= no, 1= yes)</td>
<td>(+)*</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Migration (0= no, 1= yes)</td>
<td></td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Single HH (0= no, 1= yes)</td>
<td></td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

* *p < .05; **p < .01
Regression analysis – synopsis behavior, freedom of choice and norms

- Stronger correlation of socio-economic factors with food purchase than with mobility behaviour
- Central variables: household income and education
- Purchase of organic food: effect of income on purchase behaviour only significant when education was low (but not when educ. was high)
- Relatively few effects of socio-economic factors on perceived norms (i.e., perceived environmentalism of important others)
Regression analysis with interaction test: Concern for Environment - Temporary Employment (N = 251)
Regression analysis with interaction test: Gender - Temporary Employment (N = 251)
Regression analysis with interaction test: Education - Possibility to save money (N = 306)
Regression analysis with interaction test: Number of jobs last 10 years I (N = 335) → High environ. concern
Regression analysis with interaction test: Number of jobs last 10 years II (N = 335) → Older respondents
Precariousness and Purchase of Organic Food - Results

• *Similar interaction effects of precariousness indicators and socio-demographic characteristics on perceived freedom of choice to purchase organic food as well as on environmental attitudes / environmental concern, e.g.:*

• *3-way interaction effect of HH-income, number of unemployment periods (last 10 years) and age (p < .05) on perceived freedom of choice*

• *3-way interaction effect of environmental concern, age and number of jobs (last 10 years) on attitude towards organic food (p < .05)*