

Unequal capability deployment and unequal access to affordable warmth: A mixed-method research

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Energy poverty and the capability approach

April 14th, 2021, by visio-conference

Outline

- Concepts
- Data & methods for a relational approach of the nexus energy poverty & capabilities
- Some results from the quantitative and qualitative analyses
- Concluding discussion: The capability approach widens the analysis of energy poverty.

Energy justice, unequal access to affordable warmth, and capability deprivation: A quantitative analysis for Belgium



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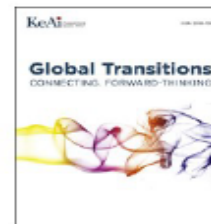
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HIGHLIGHTS

- A conceptual and quantifiable framework on energy justice and capability is proposed.
 - It is tested with statistical analyses that are replicable in other countries.
 - Energy poverty is significantly associated with deprivation of many capabilities.
 - Social stigma against energy poor is thus evident in many aspects of daily life.
 - Energy-justice policy should equalise capability deployment, not energy consumption.
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Sustainable energy transitions and social inequalities in energy access: A relational comparison of capabilities in three European countries



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ARTICLE INFO

Article history:

Received 18 July 2019

Received in revised form

8 November 2019

Accepted 8 November 2019

Keywords:

Energy transitions

Social inequalities

Capability

Accountability

Energy poverty

ABSTRACT

The influences of energy transitions on social inequity are multidimensional in their attributes and connections. For adequate accountability of their social correlates, policies aiming to implement a transition towards sustainable energy supply and demand have also to be evaluated regarding their influences on social inequalities, namely in terms of energy access and consumption. A capability-based and relational approach is used to monitor the social correlates of the governance of energy transitions. This accountability model is applied to three different European countries: Austria, Belgium, and Bulgaria. They have different characteristics in terms of levels and inequalities regarding material deprivation and energy access as well as patterns of energy transitions. The proposition here is that the capability approach could be usefully adopted to evaluate future implementation of energy transitions and to assess how they could influence inequalities in various aspects of citizen's daily life. In such a framework, the focus is on potential links between energy transitions and energy inequalities that can be channelled by their respective relations to the capabilities. Data used to quantify the inequalities regarding various capabilities are from the Generations and Gender Programme (GGP).

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Energy Poverty as a Restriction of Multiple Capabilities: A Systemic Approach for Belgium

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ABSTRACT

Energy poverty is a multidimensional issue and the capability approach is fruitful to show how energy-poor households are restricted in many aspects of well-being. With reference to Nussbaum's Central Capabilities, and based on qualitative interviews, this contribution aims to illustrate how energy-poor people are limited in five capabilities in their daily life and how these restricted capabilities sometimes reinforce each other in vicious circles. The capabilities analysed are related to material property ("Control over one's material environment"), recreational activities ("Play"), culture ("Senses, imagination and thoughts"), expression and management of emotions ("Emotions"), and to health and adequate nutrition ("Bodily Health"). These five capabilities are chosen for this contribution and analysed in this order because a recent quantitative study for Belgium has shown that the differences in their deployment are the highest between energy-poor households and energy-rich ones. Data for the present contribution are drawn from 60 in-depth interviews with persons in energy poverty that were carried out in 2014–2017 in the three Regions of Belgium.

Keywords

Capabilities; energy poverty;
capability deprivation;
vicious circles; qualitative
interviews

CONCEPTS

Concepts

- **Energy poverty (Bouzarovski and Petrova, 2015)**
 - They propose a concept of “energy service poverty”
 - To compare countries, or to statistically measure whether energy poverty is associated with other difficulties, an operational definition is necessary.
- **The energy justice paradigm (many authors after Walker, 2012; Walker and Day, 2012)**
 - 3 dimensions (distribution, procedure, recognition)
 - These 3 dimensions “are often not only interimbricated but also reinforce each other” (Bartiaux et al., 2016: 420)
 - Here: by measuring differences in energy access (distribution) in a country, the recognition of these energy injustices is enhanced.

Concepts

• **Capability (Sen, Nussbaum)**

- The concept of capability was developed during the eighties by economist Amartya Sen and philosopher Martha Nussbaum
- Def: the possibility to live a good life as defined by the persons themselves in a reasonable way given their context of life.
=> no exclusive focus on availability of means or on subjective well-being.
- Poverty = deprivation in the capability to live a good life.
- 10 capabilities hold as universal (Nussbaum, 2000): 1-life of normal length; 2-bodily health; 3-bodily integrity; 4-senses, imagination, and thought; 5-emotions; 6-practical reason; 7-affiliation; 8-other species & nature; 9-play; and 10-control over one's environment on both a political sense and a material sense.

DATA & METHODS FOR A RELATIONAL APPROACH OF THE NEXUS ENERGY POVERTY & CAPABILITIES

Data: Generation and Gender Programme (GGP) <http://www.ggp-i.org>



Details on the different waves and on the access to the data: <http://www.ggp-i.org/data/>
First wave international questionnaire: http://www.ggp-i.org/sites/default/files/questionnaires/GGP_QuestW1Full.pdf
Multi-purpose survey, very rich questionnaire

2004 data was collected on over 200,000 individuals aged 18-79 from 20 countries. The micro-data files are freely available to use for researchers.

GGP Wave 1 data are available for 20 countries:

Australia, Austria, Belarus, Belgium, Bulgaria, Czech Republic, Estonia, France, Georgia, Germany, Hungary, Italy, Japan, Lithuania, Netherlands, Norway, Poland, Romania, Russian Federation, Sweden

GGP Wave 2 data are available for 14 countries:

Australia, Austria, Bulgaria, Czech Republic, France, Georgia, Germany, Hungary, Italy, Lithuania, the Netherlands, Poland, Russia and Sweden.

Methods for a relational approach

- A five-group **typology** of households according to their access to affordable warmth
 - affordability problems in keeping the home adequately warm
 - Arrears on utility bills
 - Difficulty to meet ends, thinking of your household's total income(6-point ordinal response scale)
 - Financial and non-financial assistance granted by the State as a last resort
- Importance given to the **self-valuations on one's income** and financial possibilities (e.g. to heat the dwelling), for income and wealth also shape "our internal sense of worth in relation to others" (Fitzpatrick, 2014: 27)
- A new simple **statistical index**
- More in Bartiaux et al. (2018) and in Bartiaux et al. (2019).

As in Thomson and Snell (2013)

Qualitative data

- **60 in-depth interviews with persons in energy poverty**
 - 20 in-depth interviews in the each of the 3 Regions of the country
 - Different intermediaries, but more difficult than anticipated
 - Different socio-demographic profiles of the interviewees
 - Topics: description of the dwelling (and often of the previous one), representations and experience of comfort, budget management, social life, and health issues + often, retrospective material on these topics

In conjunction with ethnographic research in the Brussels Region

More in Bartiaux, Day & Lahaye (2021).

RESULTS

Capability 9. Play. Being able to laugh, to play, to enjoy recreational activities (moments of insouciance, lightheartedness) – **unexpected result**

Capability 9 proxies	Types of households according to their access to affordable warmth				
	Energy Poor	Poorest (last-resort aid)	Other self-perceived 'poor'	Energy vulnerable	Energy richest
Cannot afford going on a <u>one-week holiday</u> away from home at least once a year	69.5%	69.2%	40.3%	79.7%	6.9%
Cannot afford paying for a child <u>an extra-curricular activity</u> of more than one day	51.2%	(30.6%)	16.5%	85.3%	3.3%
Mean	60.3%	49.9%	28.4%	82.5%	5.1%

Source: GGP survey, Belgium, 2009

Variability index = 168.8% = (60.3% - 5.1%) / [(60.3% + 5.1%) / 2]

Note: figures in parentheses refer to subsamples smaller than 30 and figures in italics point to a non-linear trend.

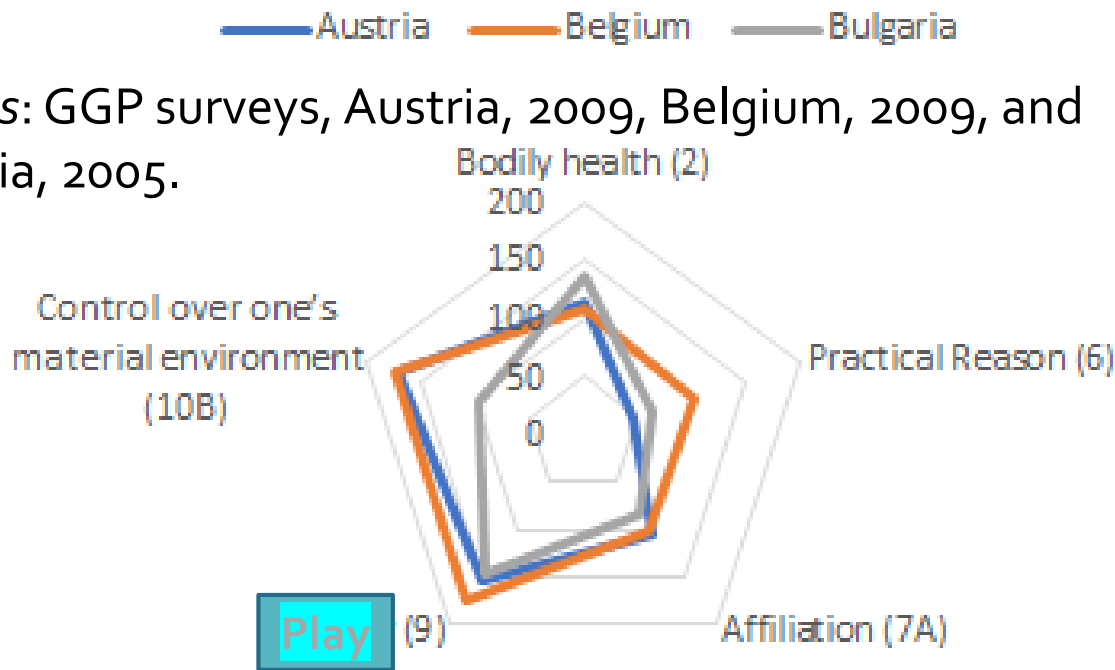
Capability differences between energy-poor households and energy-richest ones by descending order

Capability	Variability index
10B. Control over one's material environment and property	170.9%
9. Play (→ other personal & social imaginary, as in Castoriadis)	168.8%
4. Senses, imagination and thoughts (→ other imaginary)	164.3%
5. Emotions	128.5%
2. Bodily health and protein intake	126.9%
6. Practical reasons (locus of control)	105.7%
3. Bodily integrity	82.9%
2. (Bodily health continued) Adequate shelter	77.9%
7A. Affiliation	38.0%

Source: Own calculations from the GGP survey, Belgium, 2009

Capability Play (BE)				
	Energy poor	Other self-perceived poor	Energy vulnerable	Energy rich
Going on holiday	66.44	40.18	48.80	5.84
Invite for drink Friends/Family	44.67	14.77	49.41	1.49
Mean	55.55	27.48	49.11	3.66
Variability Index	175			

Sources: GGP surveys, Austria, 2009, Belgium, 2009, and Bulgaria, 2005.



From Bartiaux, Maretti, Cartone, Biermann & Krasteva (2019).

Play: “Being able to laugh, to play, to enjoy recreational activities” (Nussbaum, 2000: 80)

Variability Index			
Capability	Austria	Belgium	Bulgaria
Bodily health (2)	113	109	136
Practical Reason (6)	46	102	65
Affiliation (7A)	103	101	85
Play (9)	154 (2nd)	175 (2nd)	145 (1st)
Control over one’s material environ-ment (10B)	172	174	97

Capability 'Play': quotes from in-depth interviews with 60 persons in energy poverty in Belgium

Source : Bartiaux, Day & Lahaye (2021, 11)

- *"We don't go out, we don't even go to the cinema (...) when things will be better, well, we'll go to the seaside for one day, we will go... I don't know... We will have a walk, maybe in the centre [of the city] to have a drink together [with her daughter] on a terrace"* (Catherine, single mother, unemployed, in her forties, tenant in a social housing, Wallonia).
- *"Going on holidays? We can't. Visiting a theme park? We can't."* (Cindy, single mother, disabled, age between 25 and 49, tenant on the private market, Flemish Region).

→ Play and laughter can **provide some distance between oneself and one's living conditions** which can facilitate the questioning of them, even laughing at them.

Capability 'Play': quotes from in-depth interviews with 60 persons in energy poverty in Belgium

Source : Bartiaux, Day & Lahaye (2021, 12)

Anaphora

- *"**You've got a lot in your mind**, for me, it was judicial...There were moments when we came to live here and I had...I was busy with five or six court files. OK, you're not busy with it, it's your lawyer who's occupied with it, but it's something that engages you mentally. And if **you have to** do your housework, **you have to** care for three kids, **you have to** be aware that they go to school **and you have to** go to work...I've tried it a few times, but the concentration is... **All your attention is engaged by making ends meet**, a lot of energy goes in it. That takes most energy, seeing 'how can I make the end of the month?'"* (Renate, single mother, on a sickness leave, aged 50-64, tenant of a private dwelling, Flemish Region).

→ **rare leisure**, especially together with other persons, lack of mental availability that we have called a "**mental shrink**"
(Bartiaux, Oosterlynck, Lahaye & Day, 2019).

CONCLUDING DISCUSSION

The capability approach widens the analysis

The capability approach widens the analysis

- **An important result: a paradox**

- For all households but especially for the energy-richest, the development of all the capabilities that we could operationalise here **counteracts the deployment of the 8th capability related to the ability “to live with concern for and in relation with (...) the world of nature”**
 - Environmental and social injustices should be tackled in **conjunction**
- **BUT** in this era of climate change, policies towards distributive justice cannot equalise energy consumption between energy-poor households and energy (much) richer ones, whether within or across countries:
 - **Energy-justice policy should equalise capability deployment**, not energy consumption.

The capability approach widens the analysis

• Policy-related results

- Interface (often under-developed) between theories and empirical studies → explicit grounding of policies in tested theories
- **Energy poverty = deprivation of capabilities** not only re housing, health, mobility, and relationships but also re access to culture and leisure
- → vicious circles, crucial **extensions of the sole “heat or eat” dilemma** resulting in heavy mental load and in constant and practical difficulties as evidenced by the poor emotional well-being of the energy-poor households
- Relational approach as a method and social comparison as a daily experience make the issue of **social stigma clearer**, and thus also the dimension of **political recognition**. → Theoretically important to acknowledge that energy poverty and deprivation of capabilities are also relative to the situation of other social groups.

THANK YOU!

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