Types, explanatory models and data based examples of environmental behaviour

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Structure of the lecture

1. Types of environmental behaviour
2. Explanations of environmental behaviour
3. Data based examples of env. behaviour in various countries

What kinds of environmental behaviour are there for us?

TYPES OF ENVIRONMENTAL BEHAVIOUR

Types of personal environmental behaviour (Stern, 2010)
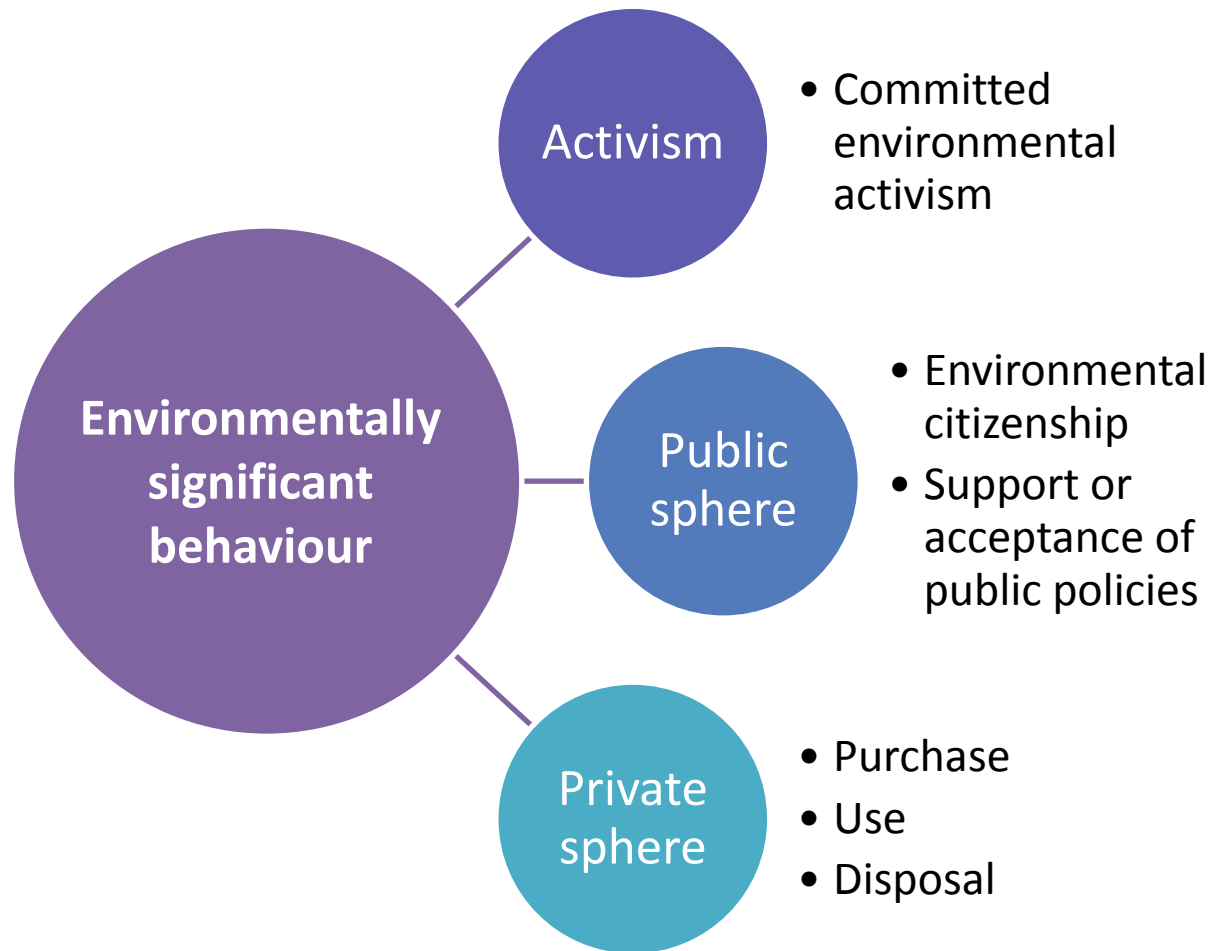
Operational definition: environmental behaviour

Personal environmental behaviour

Private sphere

Public sphere

ISSP 2010

ISSP 2010

(1) Sorting glass or tins, plastic or newspapers and so on for recycling

(2) Buying fruit and vegetables grown without pesticides or chemicals

(3) Cutting back on driving a car

(4) Reducing the energy or fuel used at home

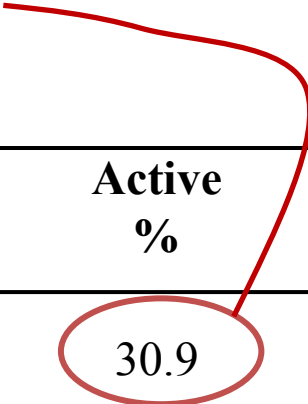(5) Choosing to save or re-use water

(6) Avoiding buying certain products

(1) environmental group membership,

(2) financial support for environmental groups,

(3) policy driven actions of petition signing, and

(4) taking part in protests or demonstrations

Level of involvement in environmental behaviour, %

Shift towards, since 1993

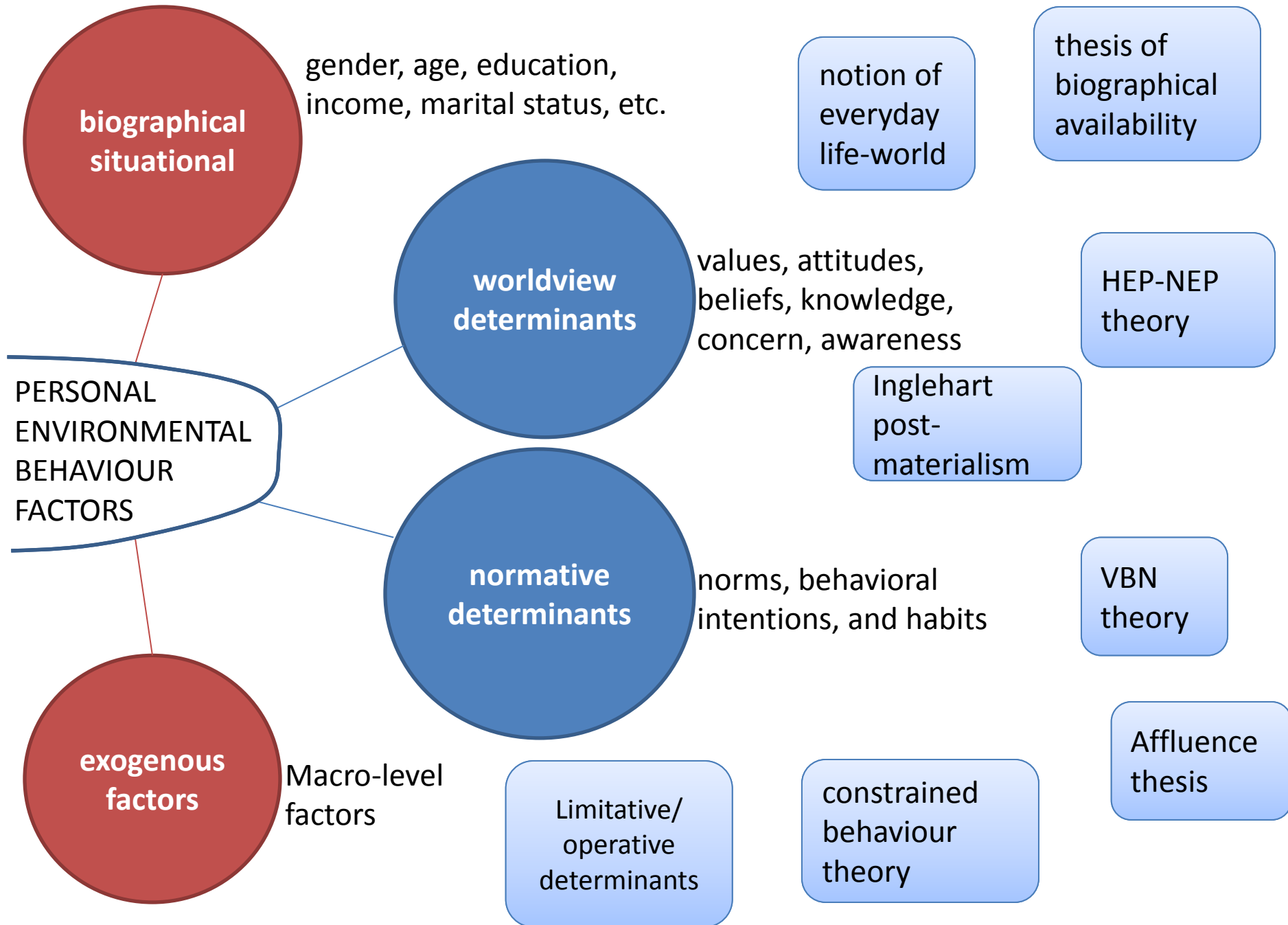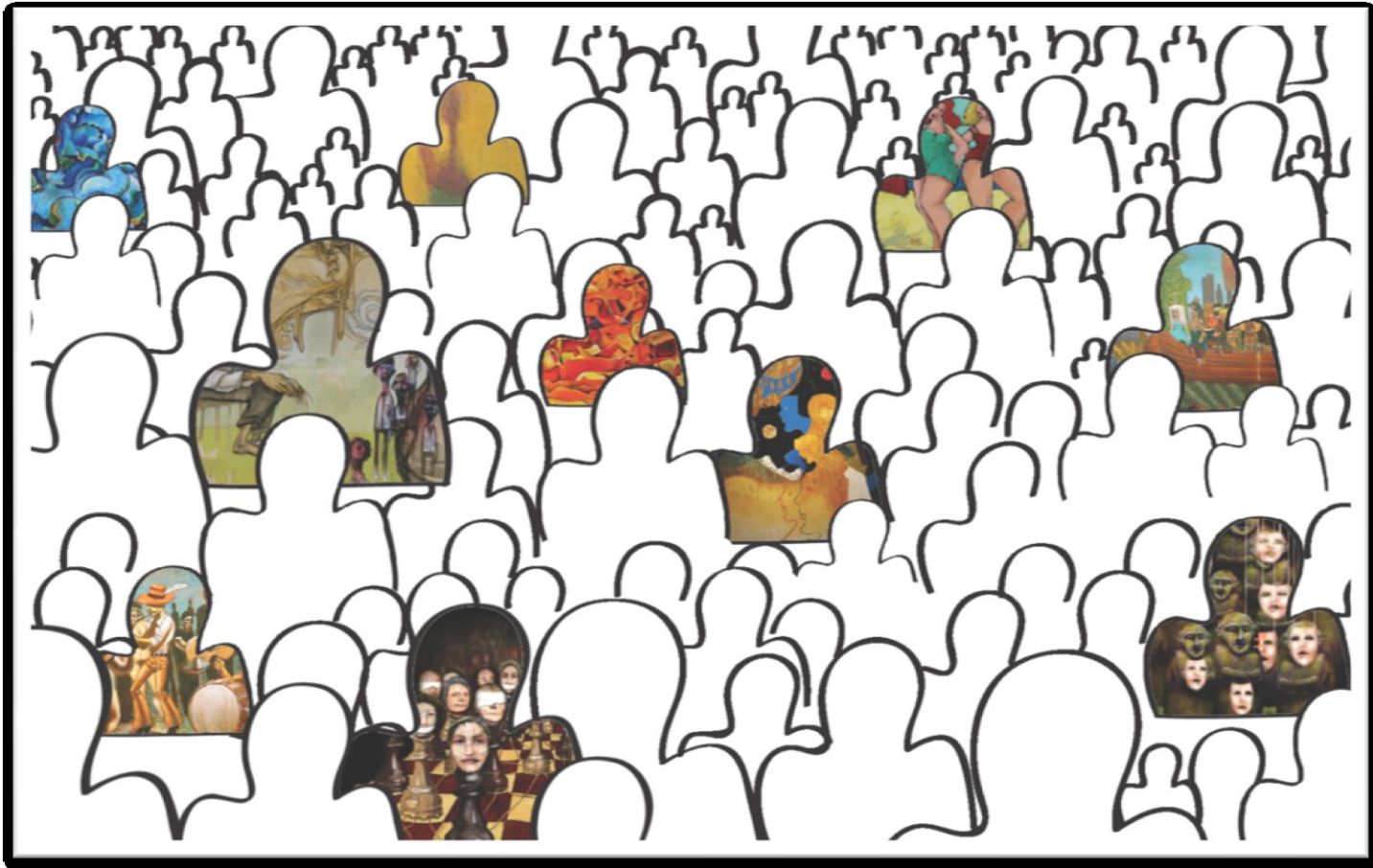|	Passive %	Active %	Total %
Private sphere behaviour	69.1	30.9	100
Public sphere behaviour	91.3	8.7	100

ISSP Environment, Lithuania, 2010, N=1023

Why individuals behave as they do?

EXPLANATIONS OF ENVIRONMENTAL BEHAVIOUR

biographical situational

gender, age, education, income, marital status, etc.

notion of everyday life-world

thesis of biographical availability

PERSONAL ENVIRONMENTAL BEHAVIOUR FACTORS

worldview determinants

values, attitudes, beliefs, knowledge, concern, awareness

HEP-NEP theory

Inglehart post-materialism

normative determinants

norms, behavioral intentions, and habits

VBN theory

exogenous factors

Macro-level factors

Affluence thesis

Limitative/ operative determinants

constrained behaviour theory

Everyday life-world, Alfred Shutz

Each individual's worldview is different, because each individual has a unique life story, unique set of biographical situations.
Thus previous experiences serve as guides for todays actions

Biographical availability thesis

- The absence of personal constraints that may increase the costs and risks of environmental behaviour (esp. movement participation).

    - E.g. cutting back on driving a car → when having small children
    - E.g. participating in a movement → when not married and not in job, e.g. studying

McAdam (1986)

Environmental behaviour types by socio-demographic variables, %

biographical situational

	Private sphere environmental behaviour, %			Public sphere environmental behaviour,%		
	Active	**Passive**	p *	**Active**	**Passive**	p *
Total	**30.8%**	**69.2%**		**8.7%**	**91.3%**	
Gender			.000			.515
Male	24.4%	75.6%		8.1%	91.9%	
Female	**36.4%**	63.6%		**9.3%**	90.7%	
Age			.000			.103
17-24	19.4%	**80.6%**		**12.9%**	87.1%	
25-39	25.6%	74.4%		8.9%	91.1%	
40-54	31.0%	69.0%		8.2%	91.8%	
55+	**41.9%**	58.1%		6.5%	**93.5%**	
Education level			.000			.000
Primary/ not completed primary	**40.4%**	59.6%		.0%	**100.0%**	
Lower secondary	20.0%	**80.0%**		2.4%	97.6%	
Secondary	24.9%	75.1%		6.8%	93.2%	
Vocational/ technical	34.0%	66.0%		6.4%	93.6%	
College	33.3%	66.7%		8.3%	91.7%	
University degree	**40.7%**	59.3%		**21.0%**	79.0%	
Place of residence[a]			.000			.000
Big city	27.0%	73.0%		9.9%	90.1%	
Small city or town	**38.6%**	61.4%		**11.4%**	88.6%	
Country village	27.1%	72.9%		1.9%	**98.1%**	

* Chi-square test, significance

a.Questionnaire included categories "the suburbs or outskirts of a big city" and "a farm or home in the country". We excluded these categories from our analysis because of small n

ISSP Environment, Lithuania, 2010, N=1023

Generalisation of influence of biographic situation (for Lithuanian case)

- Active private sphere environmental behaviour is more common among
  - women
  - people aged 55+
  - those with university degree
  - inhabitants of small towns.
- Public sphere environmental activities are more common among
  - inhabitants of small city or town;
  - those with university degree.

Correlations between private sphere behaviour, concern and knowledge

worldview determinants

	Environmental concern[a]	Knowledge: causes of environmental problems[b]	Knowledge: solutions of environmental problems[c]
Private sphere environmental behaviour index[d]	-.325**	-.118**	-.176**

Correlations between private sphere behaviour, concern and knowledge (Spearman rho)
** $p < 0.01$
a. Q: "Generally speaking, how concerned are you about environmental issues?", answers from 1 – "not at all concerned" to 5 – "very much concerned"
b. Q:"How much do you feel you know about the causes of environmental problems?", answers from 1 – "nothing" to 5 – "very much"
c. Q:"How much do you feel you know about the solutions of environmental problems?" answers from 1 – "nothing" to 5 – "very much"
d. Scale from 1 – "very active" to 4 – "very passive"

Knowledge about solutions is more effective

ISSP Environment, Lithuania, 2010, N=1023

Associations between public sphere behaviour, concern and knowledge (Eta coeff.)

worldview determinants

	Environmental concern	Knowledge: causes of environmental problems	Knowledge: solutions of environmental problems
Public sphere environmental behaviour (environmental activism) [a]	0.201**	0.195**	0.193**

** $p < 0.01$
a. dichotomous variable

Environmental concern has greater effect on private sphere env.behaviour

ISSP Environment, Lithuania, 2010, N=1023

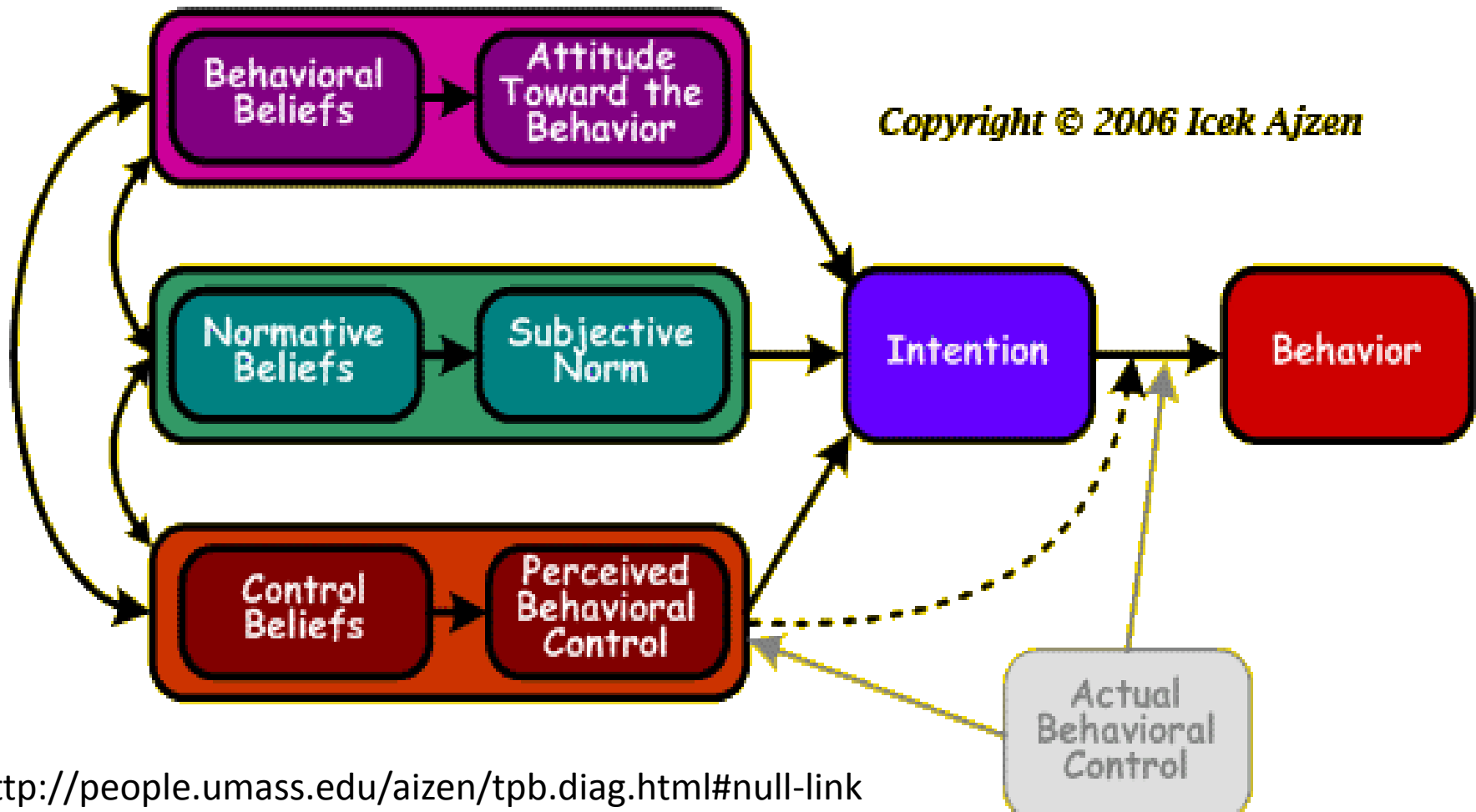# Generalisation of influence of env.worldview (for Lithuanian case)

- **Environmental concern** has significant positive influence upon environmental behaviour.

- **Subjectively assessed knowledge** about the causes and solutions of environmental problems has also significant influence upon environmental behaviour, though it is weaker than influence of environmental concern.

VBN theory (Stern 2000)

worldview determinants + **normative determinants**

Values	Beliefs	Proenvironmental Personal Norms	Behaviors

Biospheric ⟶ Ecological worldview (NEP) ⟶ Adverse consequences for valued objects (AC) ⟶ Perceived ability to reduce threat (AR) ⟶ Sense of obligation to take proenvironmental actions

Altruistic

Egoistic[b]

Behaviors:
- Activism
- Nonactivist public-sphere behaviors
- Private-sphere behaviors
- Behaviors in organizations

I.Ajzen. Theory of planned behaviour

normative determinants

Copyright © 2006 Icek Ajzen

Behavioral Beliefs	→	Attitude Toward the Behavior
Normative Beliefs	→	Subjective Norm
Control Beliefs	→	Perceived Behavioral Control

Intention → Behavior

Actual Behavioral Control

Limitative/operative determinants

- Limitative determinants:
  - availability of infrastructure, technologies
- Operative determinants:
  - having necessary tools to conduct a behavior,
  - governmental regulations,
  - community expectations.

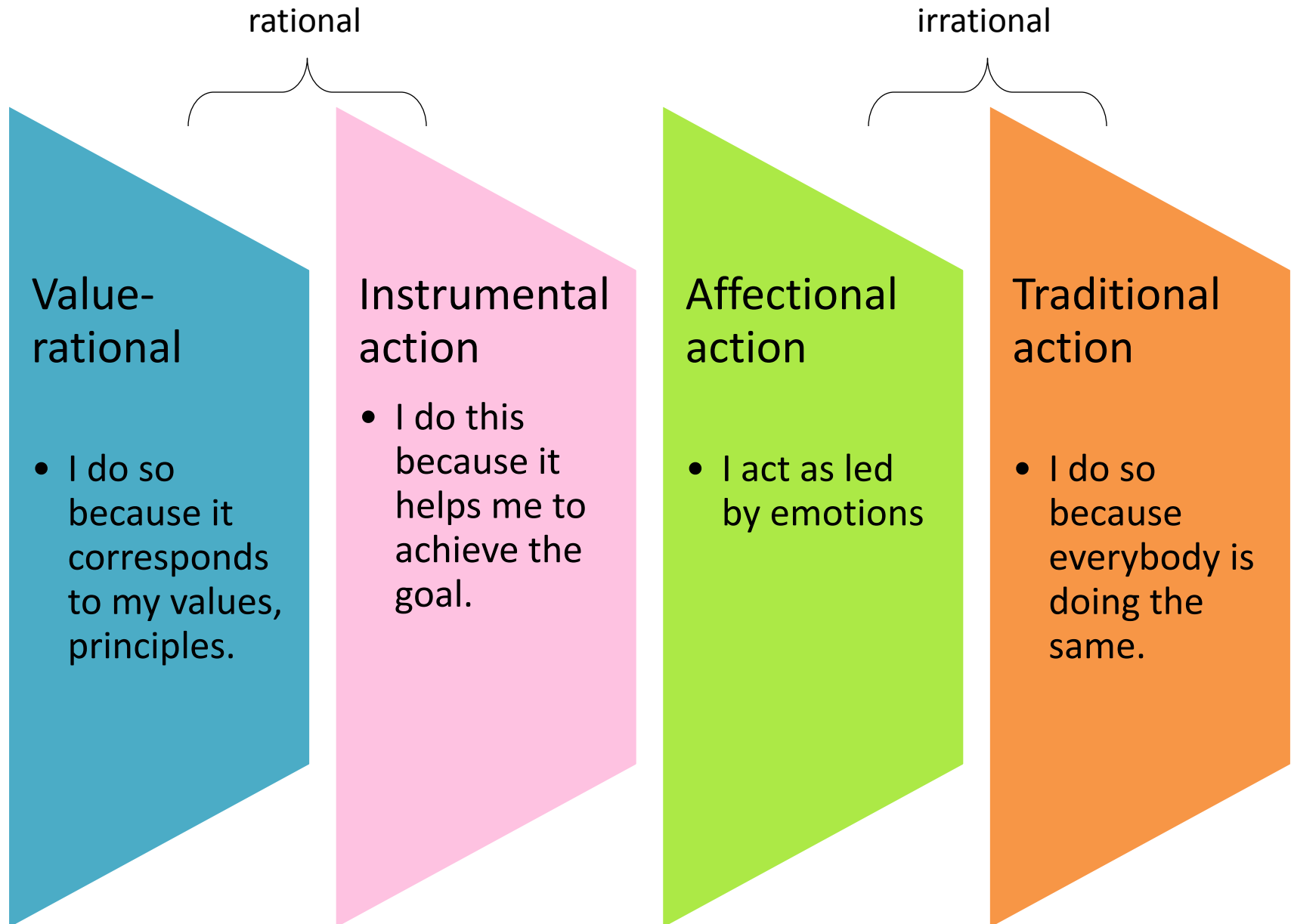Societal level factors that make limiting or enabling contexts for individual behavior.

e.g., Van der Meer (1981)

Constrained behaviour thesis

- Behaviour that is relatively more difficult to conduct is less likely in many populations.

- Constrains might occur because of behavioral situational characteristics (e.g. lack of income or time) or context forces (e.g. lack of infrastructure, low community support).

Interestingly, Guagnano et al (1995) state that when contextual factors are strong and environmental behavior is constrained, e.g. difficult to conduct, time-consuming, expensive attitudinal and normative variables only weakly correlate with behaviour.

Linking theories

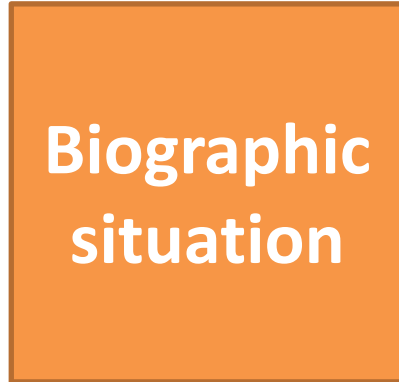## 1. Behind -personal

External factors

2. Personal

Biographic situation

3. Inside - personal

Value
Instrumental
Affective
Traditional
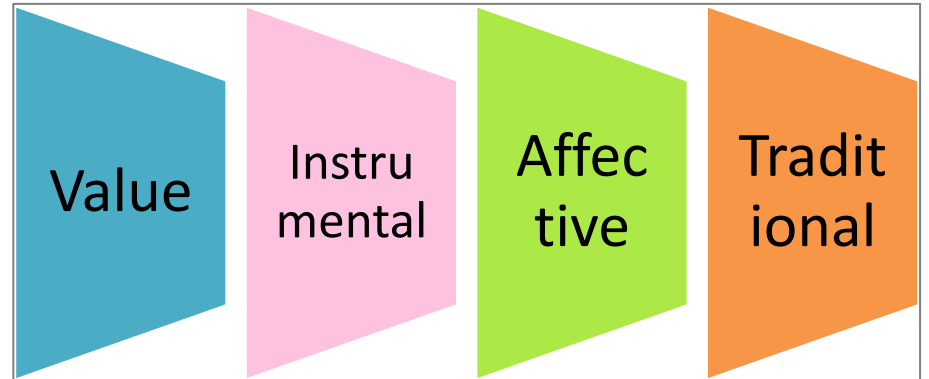
Affluence thesis

Inglehart post-materialism

HEP-NEP theory

notion of everyday life-world
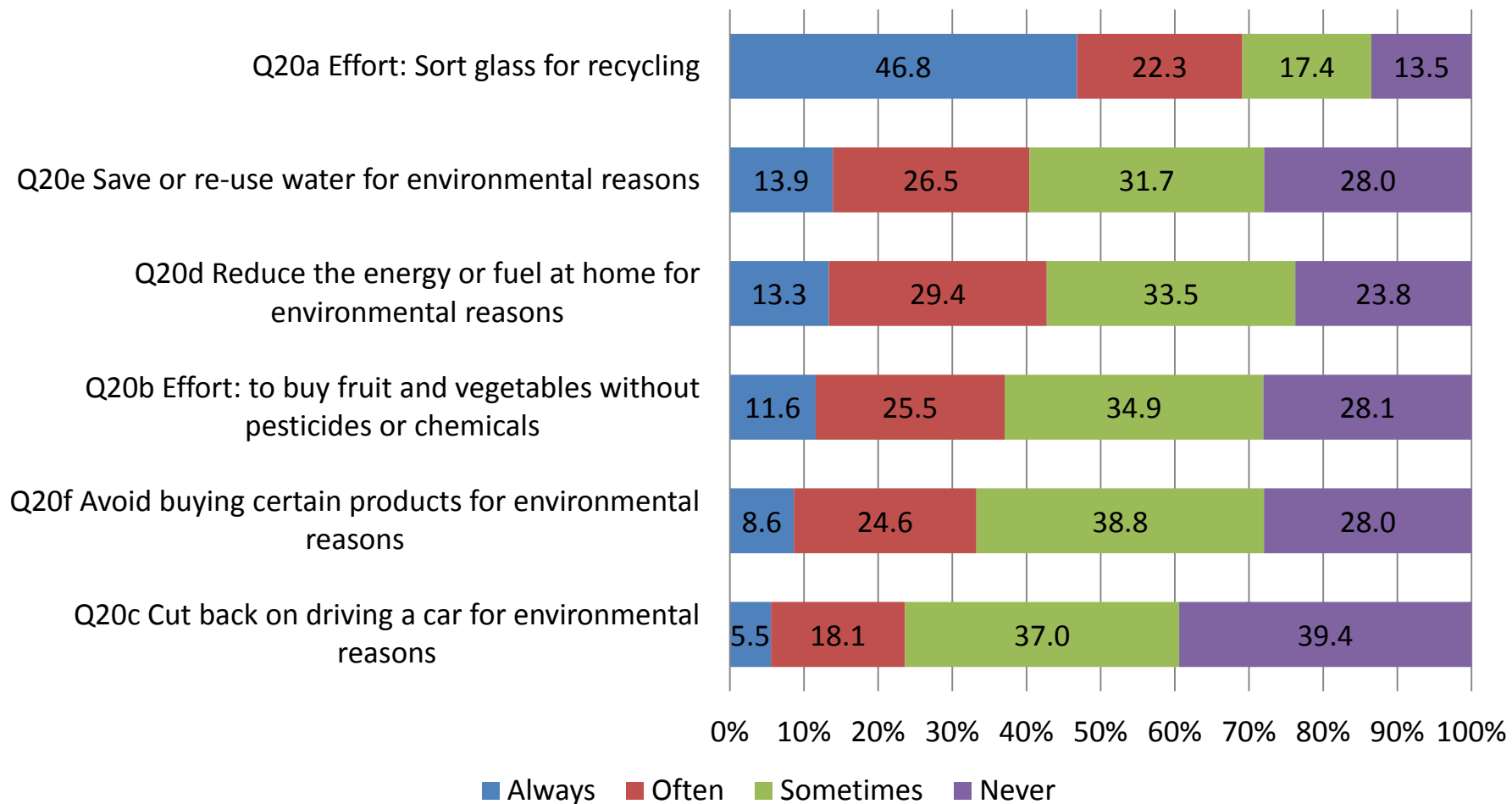
thesis of biographical availability

VBN theory
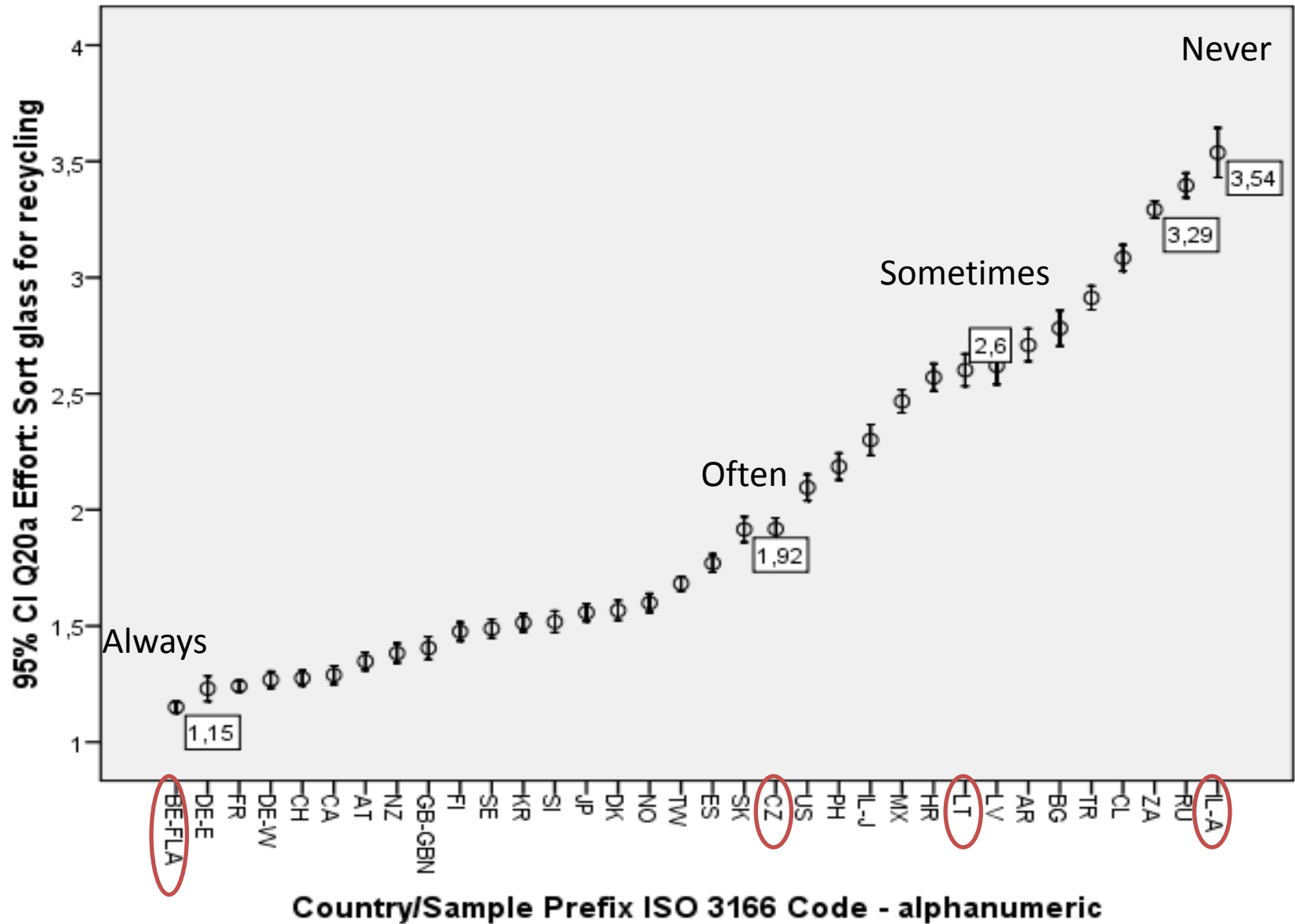
Limitative/ operative determinants

constrained behaviour theory

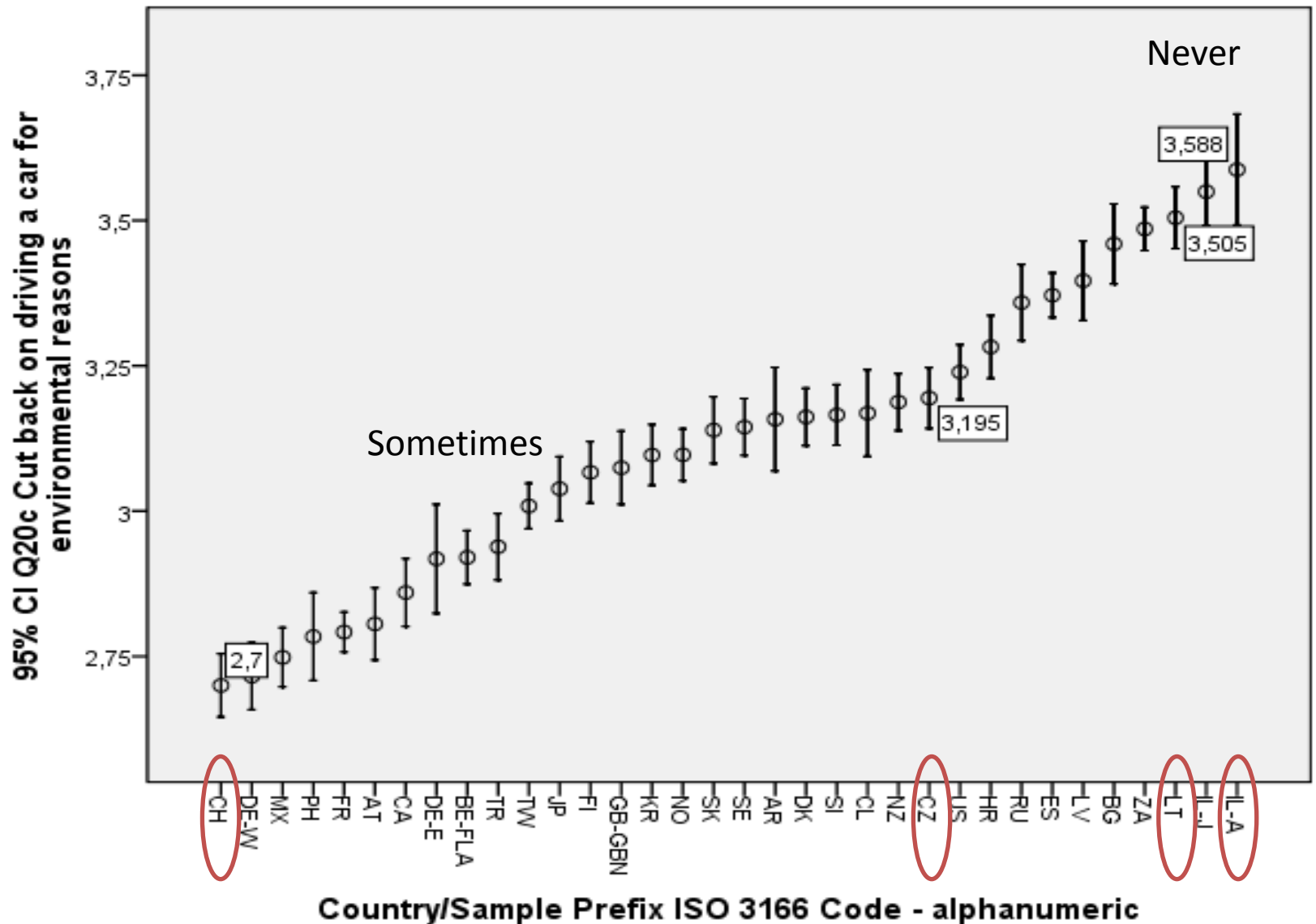# DATA BASED EXAMPLES OF ENV. BEHAVIOUR IN VARIOUS COUNTRIES

Private sphere env. behaviour

Behaviour	Always	Often	Sometimes	Never
Q20a Effort: Sort glass for recycling	46.8	22.3	17.4	13.5
Q20e Save or re-use water for environmental reasons	13.9	26.5	31.7	28.0
Q20d Reduce the energy or fuel at home for environmental reasons	13.3	29.4	33.5	23.8
Q20b Effort: to buy fruit and vegetables without pesticides or chemicals	11.6	25.5	34.9	28.1
Q20f Avoid buying certain products for environmental reasons	8.6	24.6	38.8	28.0
Q20c Cut back on driving a car for environmental reasons	5.5	18.1	37.0	39.4

■ Always ■ Often ■ Sometimes ■ Never

ISSP Environment, 2010, N=45199

Recycling behaviour*Country

ISSP Environment, 2010, N=41786

Cut back on driving a car*Country

ISSP Environment, 2010, N=45199

Public sphere env. behaviour

Electronic signature !

	Yes	No
Q22a Last five years: signed a petition	14.2	85.8
Q22b Last five years: given money to an environmental group	11.4	88.6
Q21 Member of a group to preserve environment	5.1	94.9
Q22c Last five years: taken part in protest demonstration	4.0	96.0

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

■ Yes ■ No

ISSP Environment, 2010, N=45199
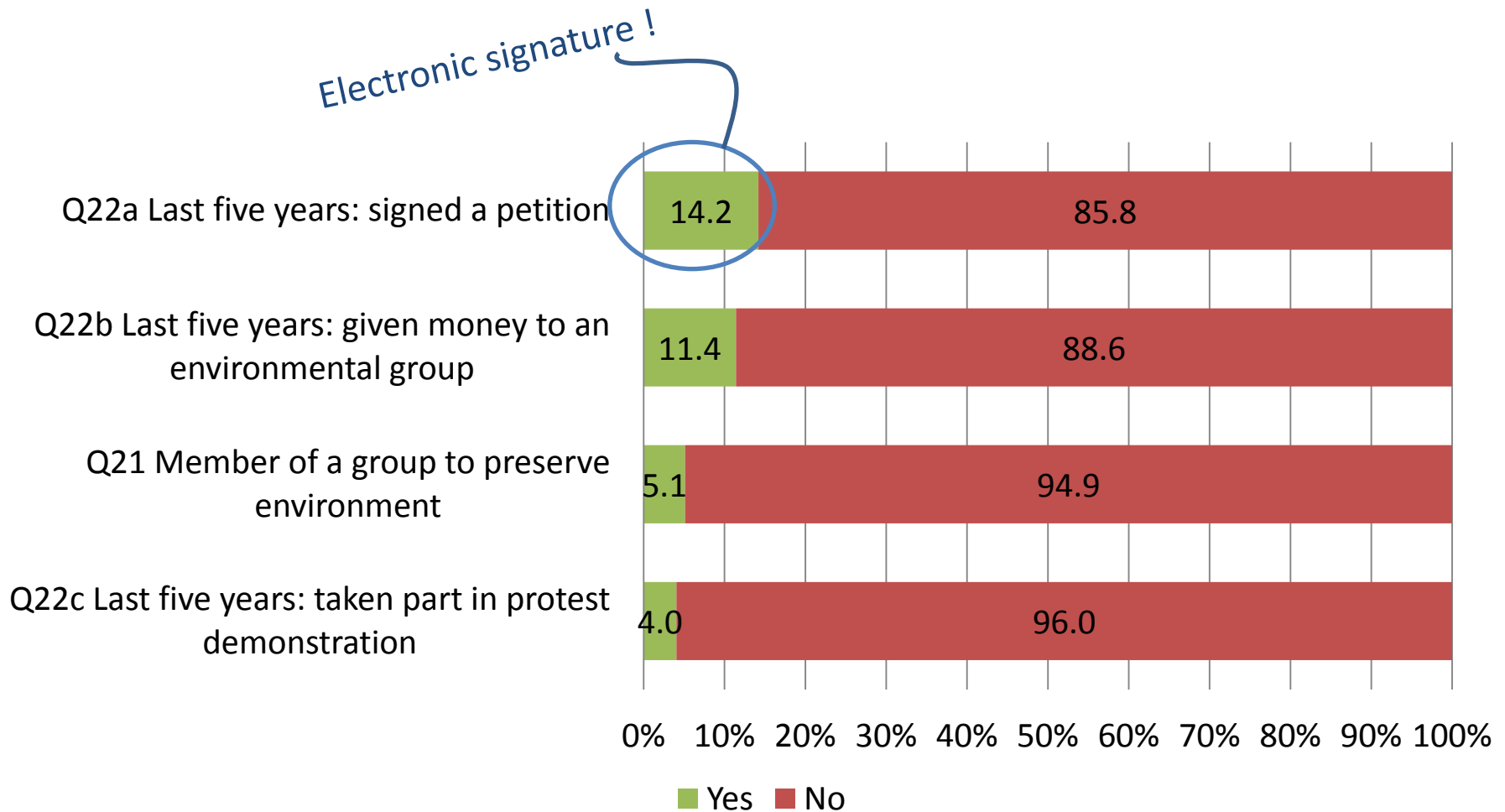
Signed a petition*Country

ISSP Environment, 2010, N=44489
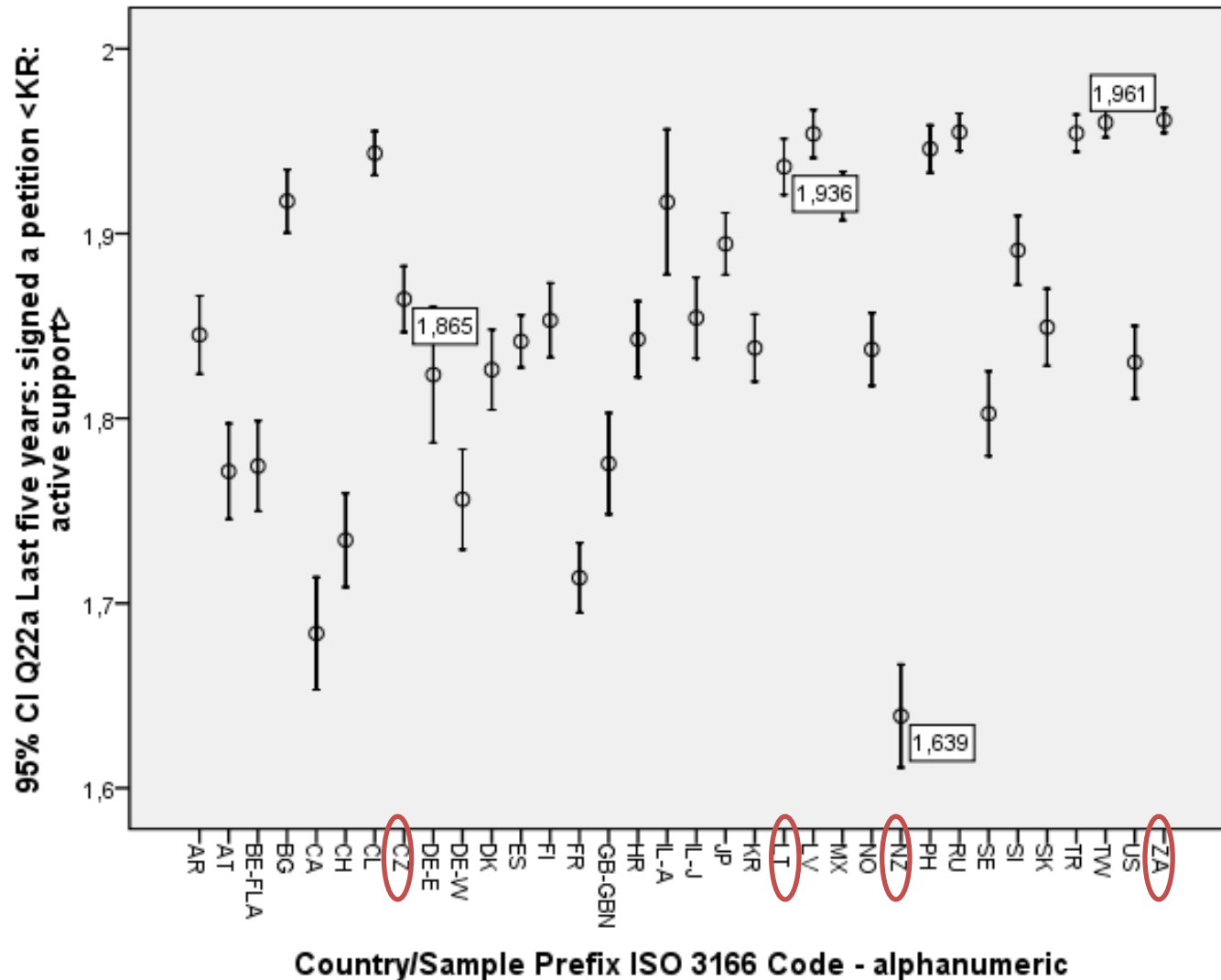
Took part in protest*Country

ISSP Environment, 2010, N=44411
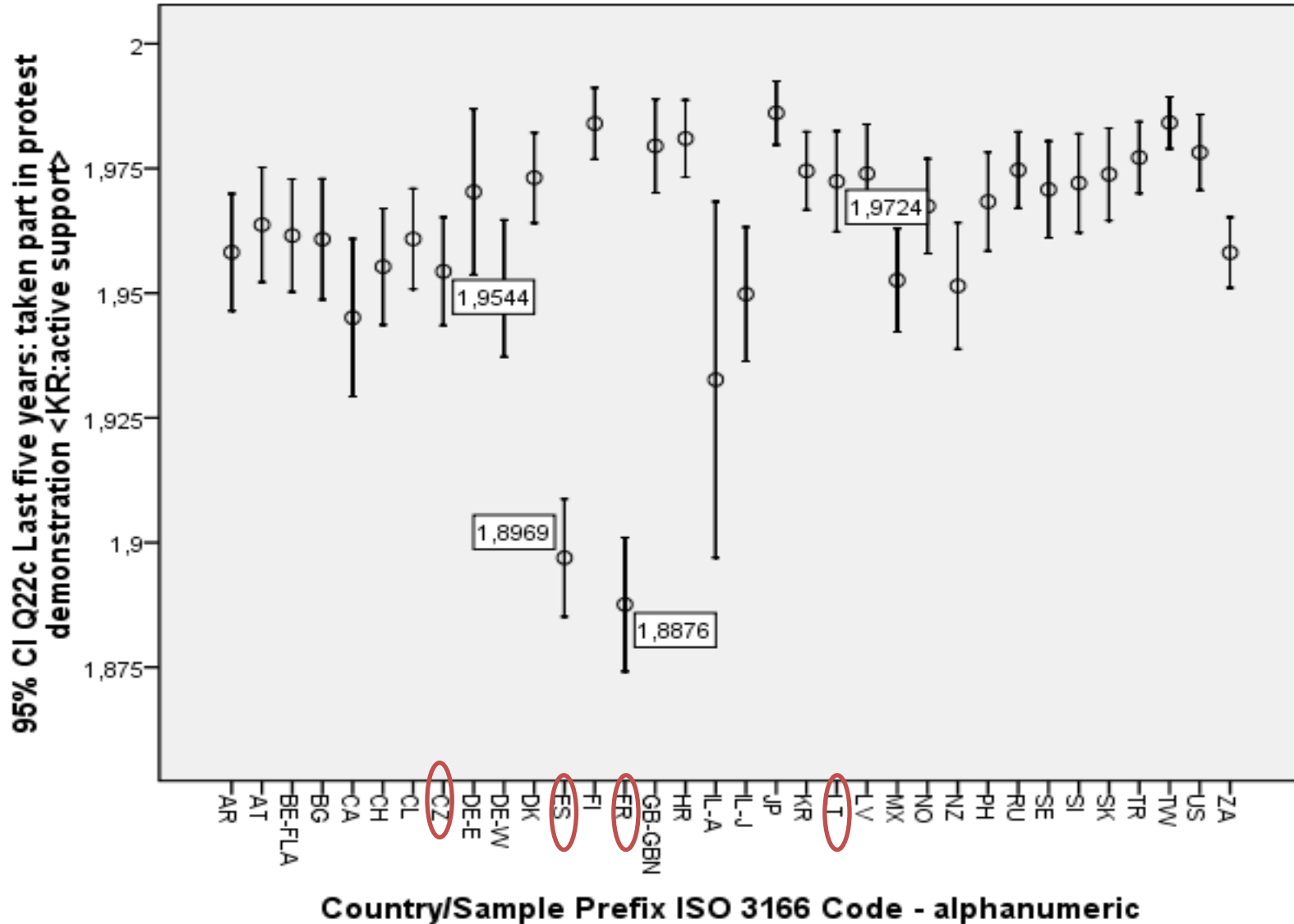
Cutting back on driving a car: behaviour explained

INFLUENCING FACTORS

Habit
- Normative determinant
- No alternatives; part of social status

Other pro-environmental behaviour
- Normative determinant
- Norm reinforcing

Knowledge and concern
- Worldview determinants, shaped by biography

How to break the habit?

Reducing personal car usage

EXAMPLE. ISSP 2010 Environment data for Lithuania + Qualitative research
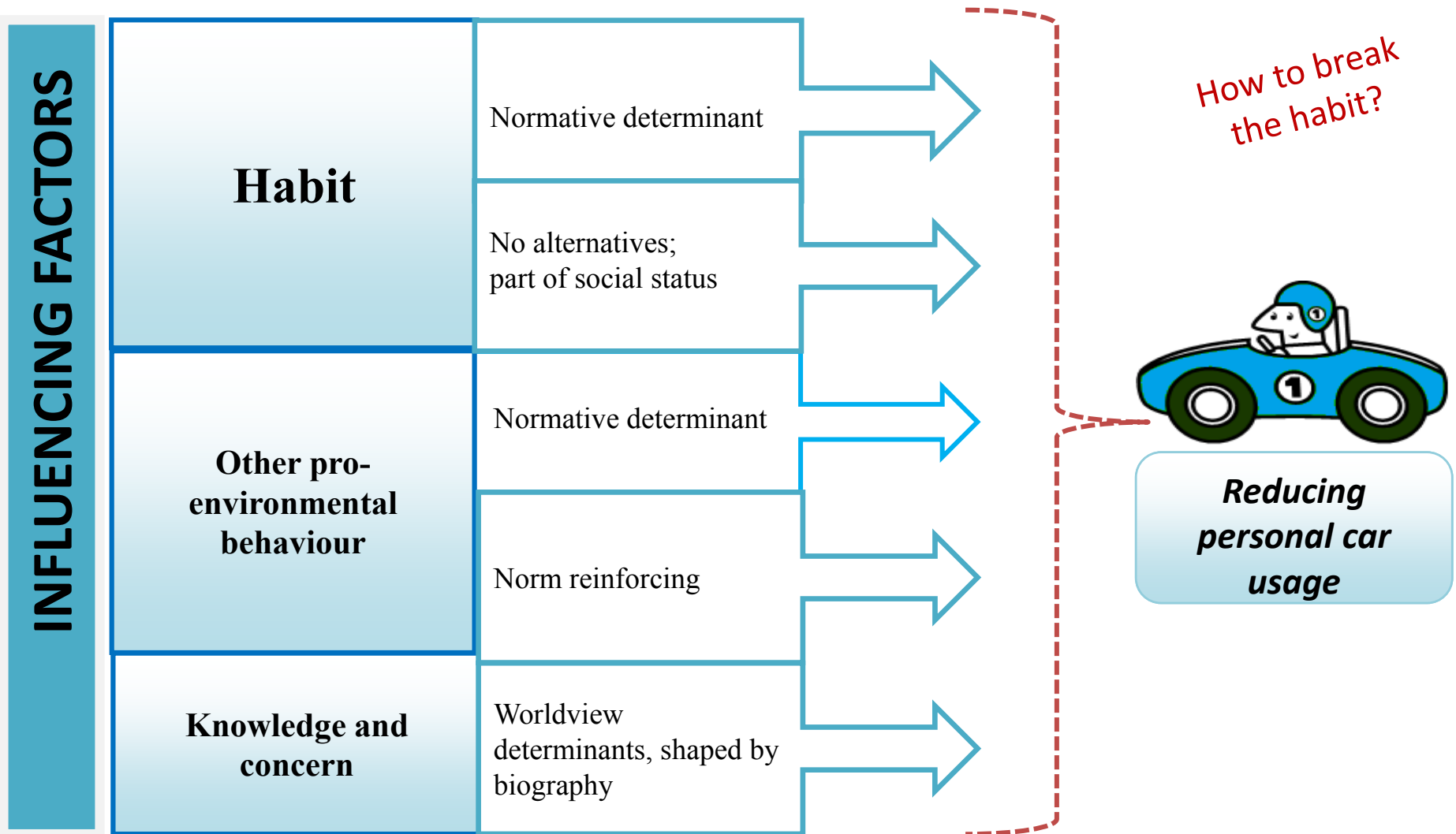
Why individuals act as they do?

Value-rational

- because it corresponds to values, principles

Instrumental action

- because it helps to achieve the goal

Affectional action

- Because of emotions

Traditional action

- because everybody is doing the same

Yes

Yes

No

Yes

Cutting back on driving a car

How to break the habit?

Examples

- Sports mega events: Sochi Olympic games

- Creative agency: Environmental Health Clinic

Bike Messenger

- Sports mega-events oblige for infrastructural and socio-cultural transformations of urban systems.
- Surveys traced change in environmental practices and consumption in Sochi.

P. O. Ermolaeva (2015) [unpublished]

Concluding remarks

- Behaviour specific explanations recycling ≠ litter control ≠ car driving
- Power of **HABIT**
- Enabling/restraining contexts
- Influencing worldviews
- Reinforcing norms

Types, explanatory models and data based examples of environmental behaviour

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