

Societal perception of the forest-based sector in context of a bioeconomy

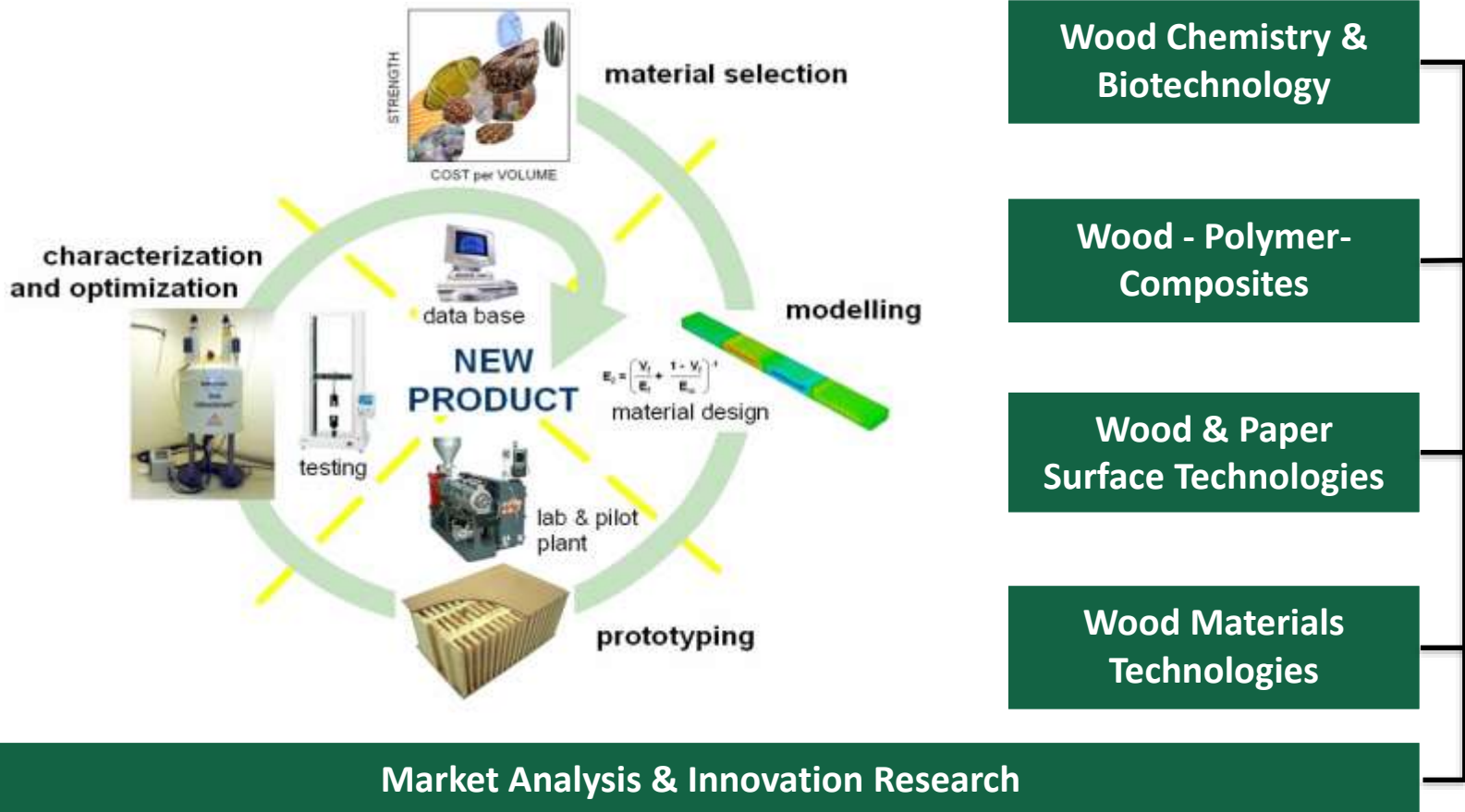
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Wood K plus - Kompetenzzentrum Holz

Research institute in the area wood and wood-related renewable resources

Core competences in materials research and process technology along the entire value chain



A few words about me

Wood K plus:

- Researcher: Market Analysis and Innovation Research Team
- Research interest: Perceptions of forest-based sector value chains & bioeconomy, role of communication for transition

BOKU Vienna:

- Lecturer
- 2017 PhD in Social and Economic Sciences
- 2013 Master's degree in Natural Resources Management
- PerForm – Perceiving the forest-based Sector in the bioeconomy (<https://perform-bioeconomy.info/>)



Motivation

'In agreement with the public nothing can fail, without public acceptance nothing will succeed' - Abraham Lincoln



Pants made from viscose from an online shop

<https://www.bonprix.at/produkt/7-8-jerseyhose-dunkelblau-gebluemt-946028/>

Theoretical background

- Perception of forest-based sector important for the transformation towards a bioeconomy
- Critical perception of forest management (e.g. Fabra-Crespo et al. 2014)
- Limited knowledge about wood-based innovations and questioning environmental benefits (Ranacher et al. 2018, Stern et al. 2018)
- Media play important role in opinion building processes regarding forest issues (e.g. Riedl et al. 2017, Östberg & Kleinschmit 2016)

„The media does not tell us how to think about a topic, but what topics to think about“ (Cohen 1963)

Aim & research questions

Overall aim: Describe the public perception of the forest-based sector (FBS) and bioeconomy and the implications of media reporting for the transformation towards a bioeconomy

Specific research questions:

- What is the public perception of the FBS in context of a bioeconomy? (Study I)
- Characterize the available information on forest management in online news media (Study II)
- How can targeted communication impact perceptions of harvesting activities? (Study III)
- What is the public perception of the bioeconomy (Study IV)

Study I: Research design

- Online survey with items on sustainable forest management & climate change
 - Items generated from content analysis of online communication from FBS companies and associations (Korhonen et al. 2016)
 - Polarized items with 5-point-Likert scale incl. „I don't know“
- Convenience sampling through personal networks in Austria
 - 45% University degree, 55% aged 30 or under
 - 50% involved in the forest-based sector (e.g. profession, education, family)
- Analysis
 - Chi-square tests
 - Comparison of results to messages conveyed by forest-based sector

Study I: Perception of forest-based sector

- Weak perception of the responsible use of forest resources & the role of wood products in climate change
- Significant differences as a result of profession, education or forest ownership of individuals

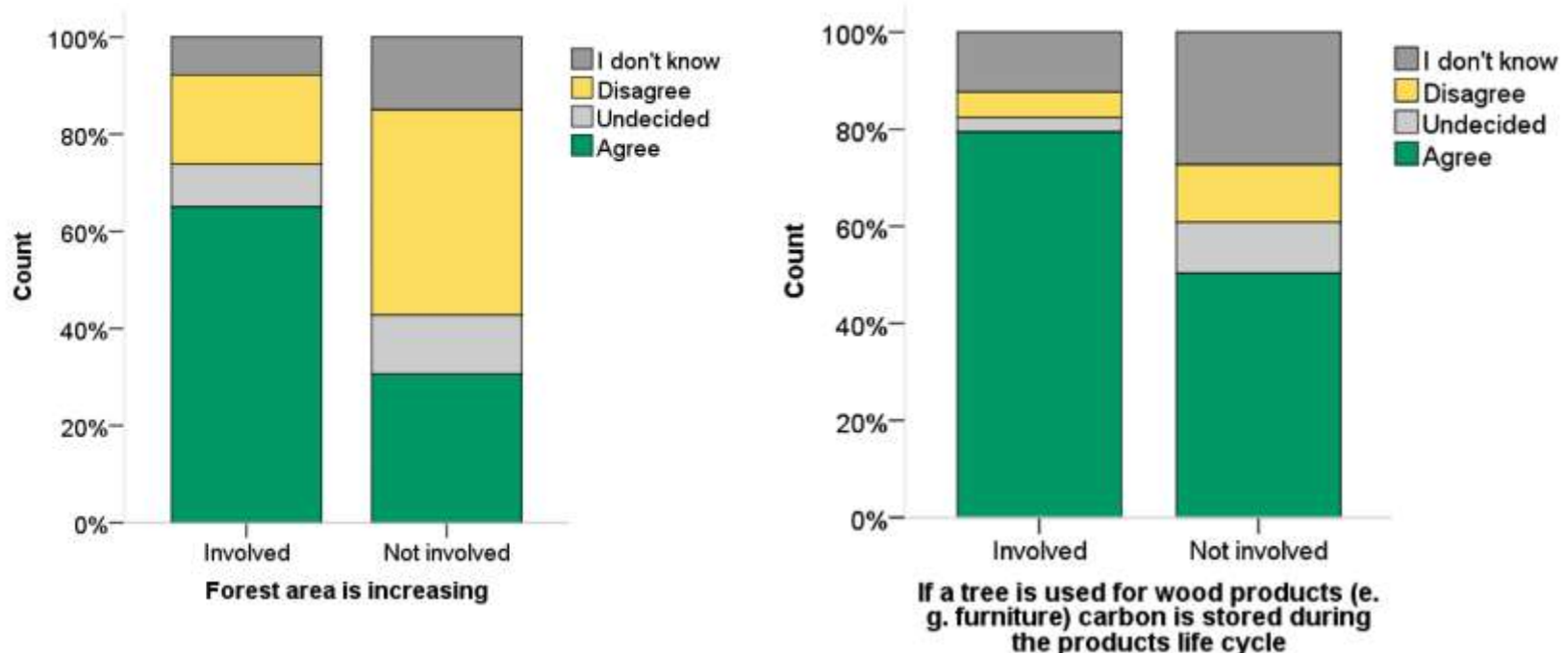


Fig. 1: Differences in answer behavior as a result of sector involvement ($n_1=204$; $n_2=194$); Ranacher & Stern (2016), Ranacher et al. (2017)

Study II: Research design

Google Alerts:

- Keyword „Forstwirtschaft“ (engl. forest management)
- Language “German“ and sources „News, Blog, Web“
- 1 year time span 13.2.2016-12.1.2017 provided 879 articles
- Check for relevancy and public access resulted in 610 articles

Qualitative content analysis (Bauer 2000):

- Descriptive
- Unit of analysis = article
- Inductive coding scheme for topic
- Characterisation of topic, media category, country, scope

Study II: Media reporting on forest management

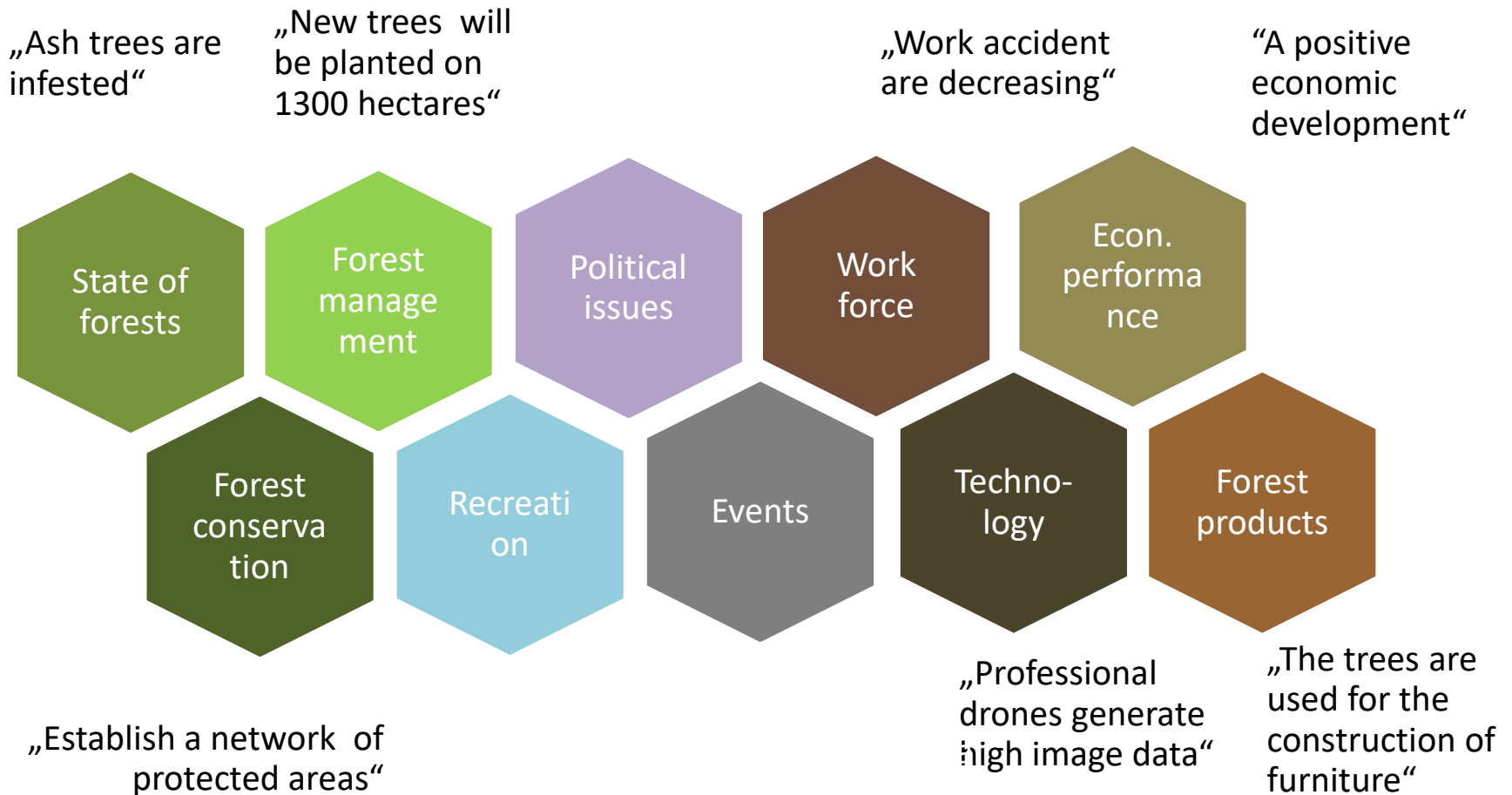


Fig. 2: Identified topics in German speaking news media articles on forest management (N=601), Ranacher et al. 2018

Study IV: Research design

- Provide Stimulus (e.g. definition of bioeconomy) and ask question: *„After you heard the definition of bioeconomy, I would like to know your thoughts on bioeconomy“*
- Subsequent questions using the Laddering Method („Why?“)

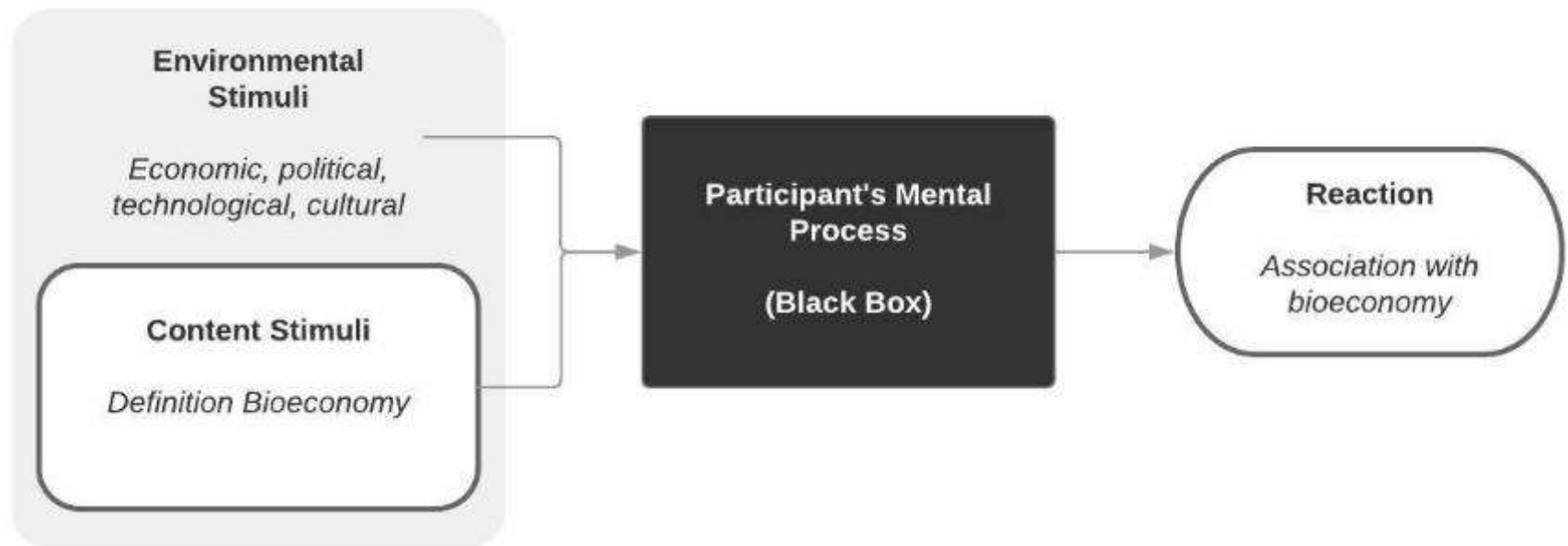


Fig. 3: Kotler's stimulus-response model (adapted from Kanagal, 2016)

Study IV: Stimulus

*“Bioeconomy is a type of economy, which relies upon renewable **natural resources to provide food, energy, products and services**. It can contribute to a reduction of our dependence on fossil fuels, to the **development of innovation and economy**, and to create new jobs.”*

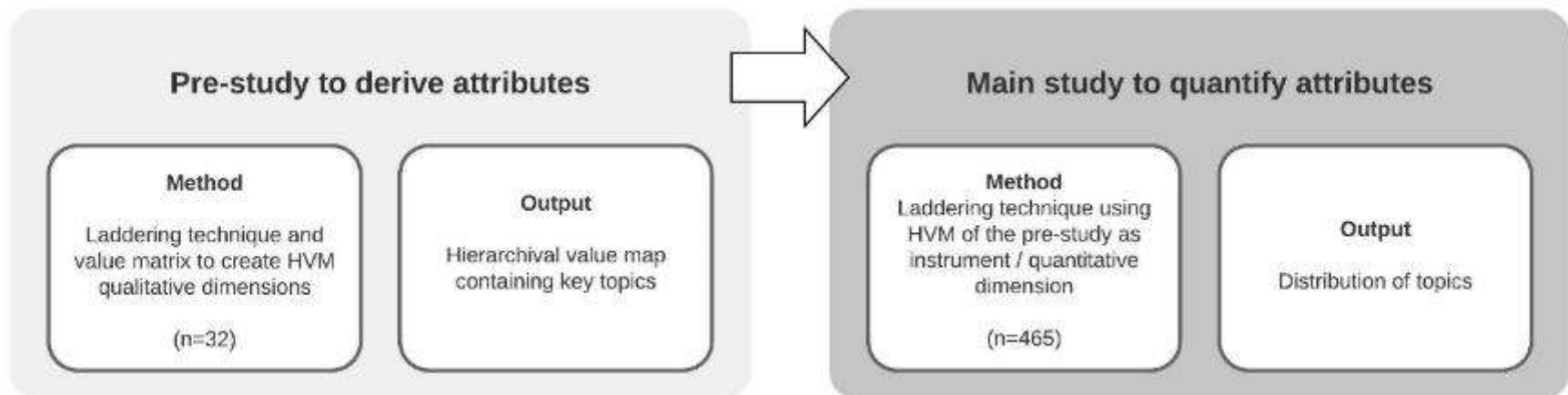


Fig. 4: Research design based on a pre-study and a main study

Study IV: bioeconomy perceived positively

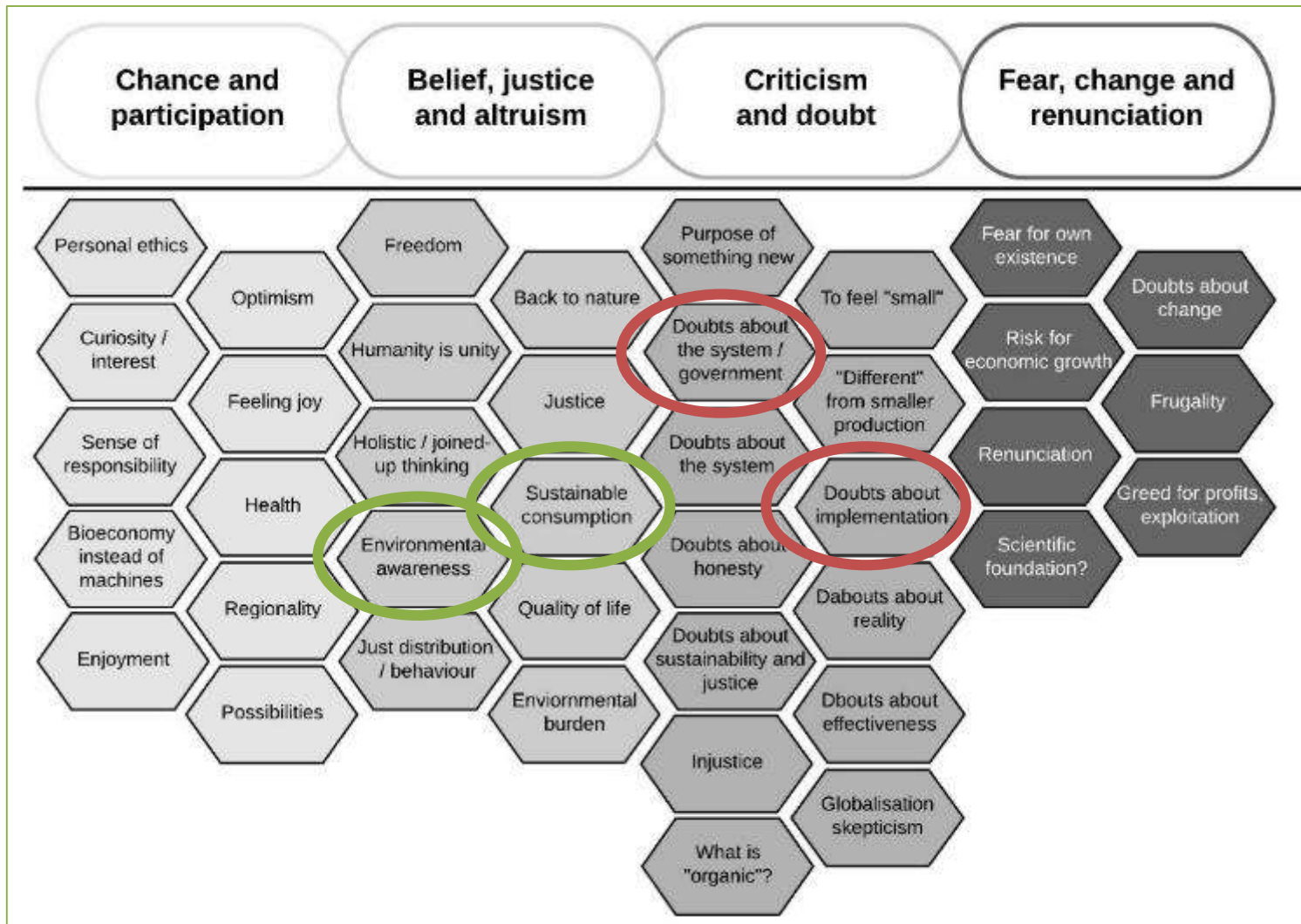


Fig. 5: Mentioned attributes of the respondents by value dimensions (N=456) Stern et al. 2018

Conclusions

- There is scepticism towards the environmental claims made by the forest-based sector, especially among non-involved individuals
 - The concept of bioeconomy perceived positively, however there are doubts regarding its implementation
 - Media coverage highlights economic benefits and vulnerability of forests, which poses a risk for acceptability of forest use
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- Public perception & media reporting indicate a conflict between the positive attitude towards the use of natural resources and the fear of their exploitation.
 - Future research shall explore how this conflict influences sustainable consumption behaviour regarding bio-based products

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- * = paper presented in this presentation

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