The Psychology of a Sustainable Bioeconomy

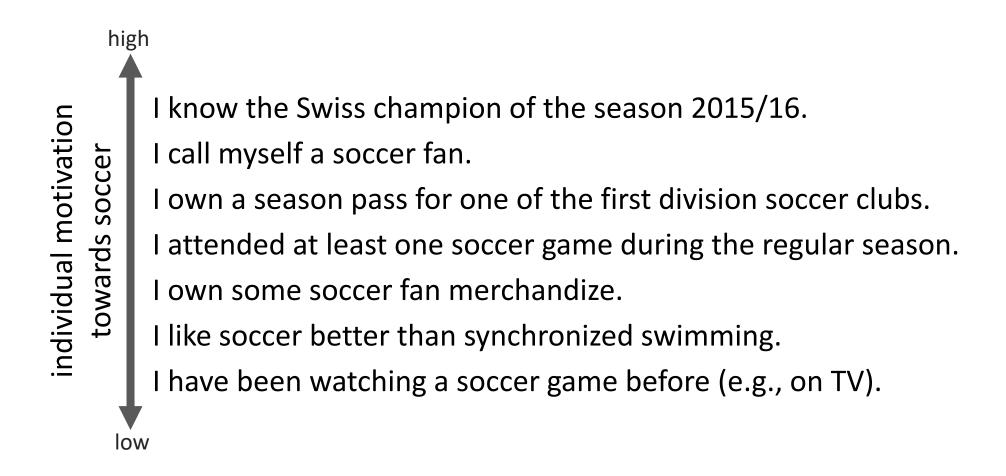
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Let's start with an experiment ...unrelated to bioeconomy: Please rise



A circular economy needs consumer and citizen support in many ways

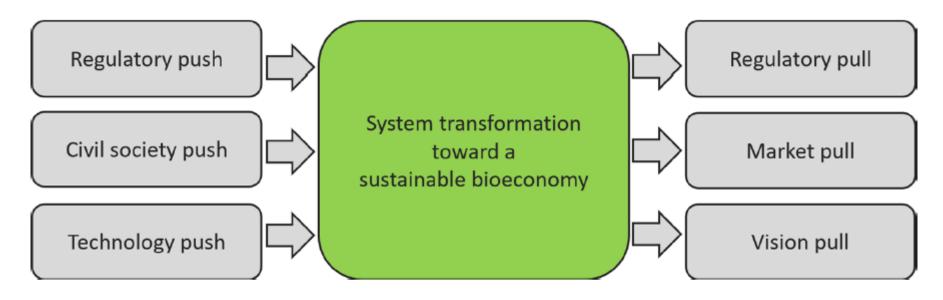
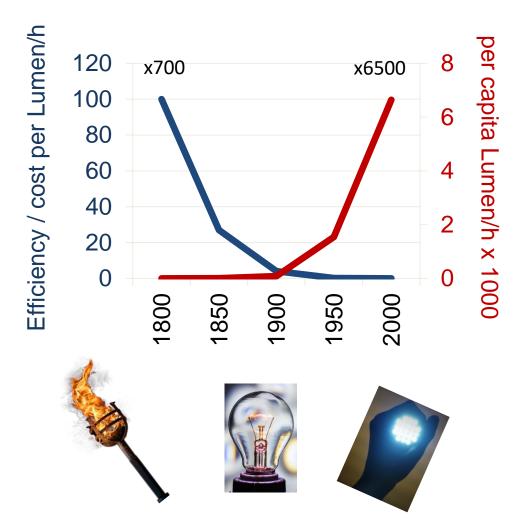


Fig. 1 Push and pull factors for the transformation of the system toward a sustainable bioeconomy (based on Fichter, 2005, p. 132)

Otto, S., Hildebrandt, J., Will, M., Henn, L., & Beer, K. (2021). <u>Tying up loose ends.</u> <u>Integrating consumers' psychology into a broad interdisciplinary perspective on a circular sustainable bioeconomy.</u> *Journal of Agricultural and Environmental Ethics, 34*(2), Article 8.

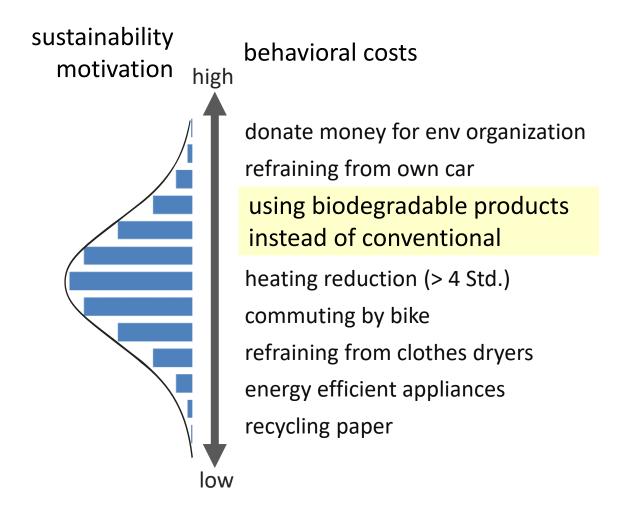
Most progress relies on (resource) efficiency increases which leads to more consumption (i.e., rebound / Jevons Paradox)



- people want to fulfill their goals (desires, dreams, ...)
- sustainable behavior IS NOT a prime goal of most
- additional consumption / rebound is the norm
- also applies to a more efficient bioeconomy and resource use

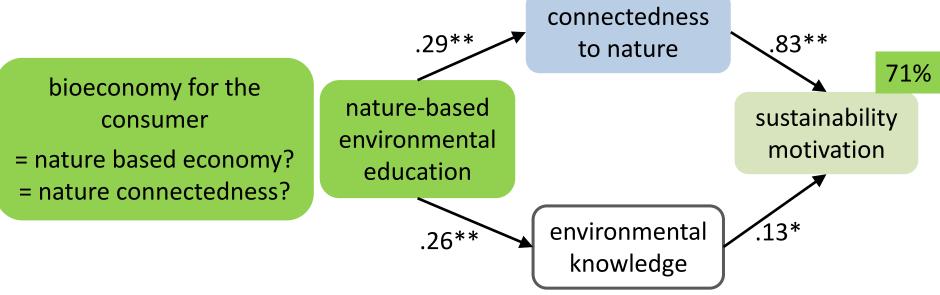
Herring & Roy, 2007

A sustainable circular bioeconomy needs motivated consumers and citizens that overcome some behavioral costs to support a sustainable bioeconomy



Many Thanks

Increasing connectedness to nature can foster sustainability motivation



➤ Bioeconomy products are not just sustainable themselves, they might even foster sustainability motivation

structural equation model

good match of unaltered model:

•
$$\chi^2 = 2.4$$
, $df = 2$, $p = .31$

Otto & Pensini (2017)

Conclusion

Bioeconomy increases energy- and resource efficiency and this could result in rebound and yet more consumption

Psychological methods can be used to foster the adoption of bioeconomy on the individual level through reduction of behavioral costs and fostering sustainability motivation

By using "the nature" in bioeconomy, we might be able to increase sustainability motivation and foster a more sustainable bioeconomy