

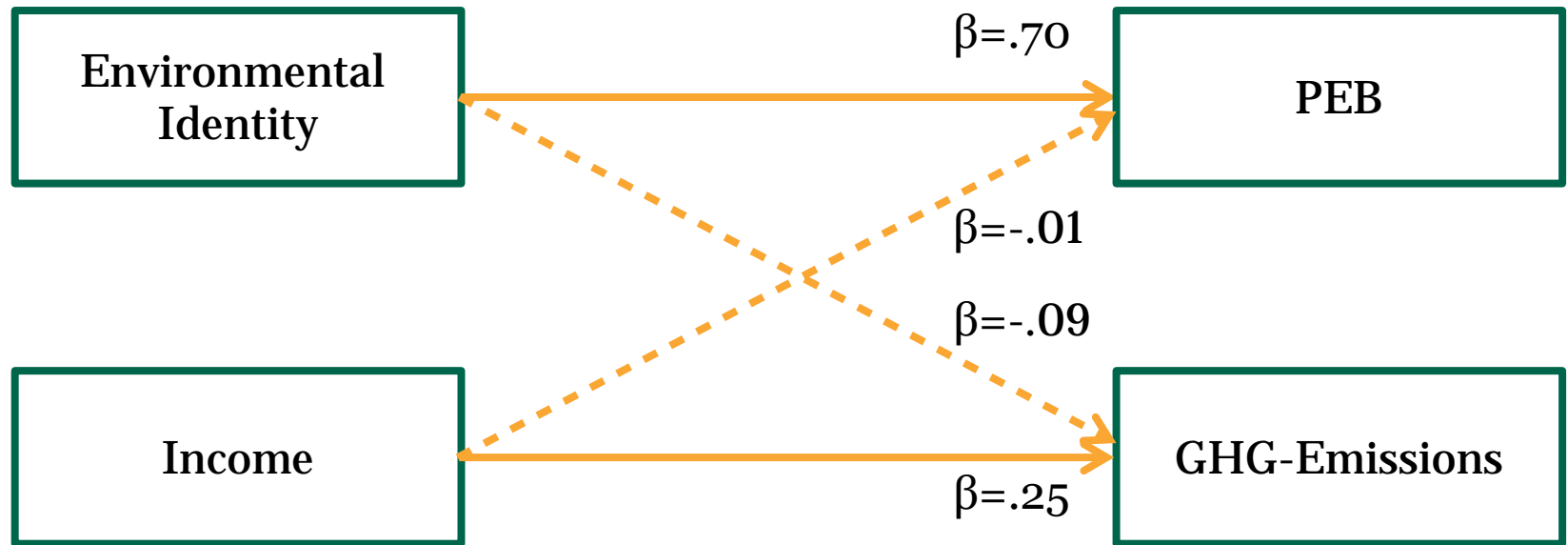
Money buys an SUV, while time fosters sufficiency?

The influence of working hours, income and available time on high-impact unsustainable behaviour and pro-environmental behaviour

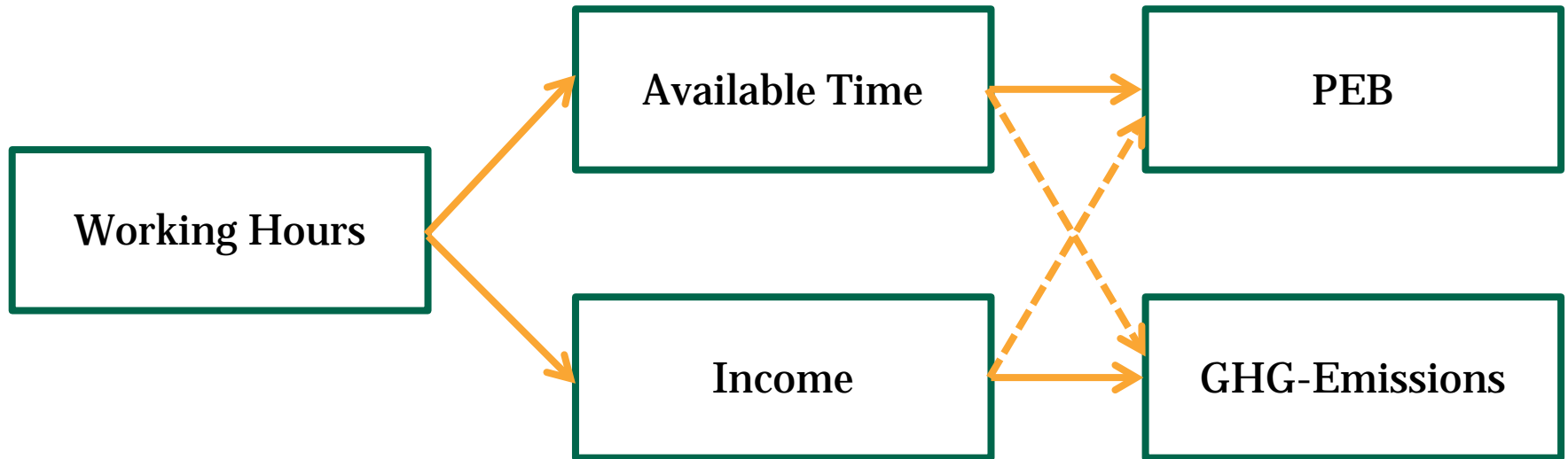


Sebastian Neubert
Hugo Hanbury, Christoph Bader, Stephanie Moser

Introduction



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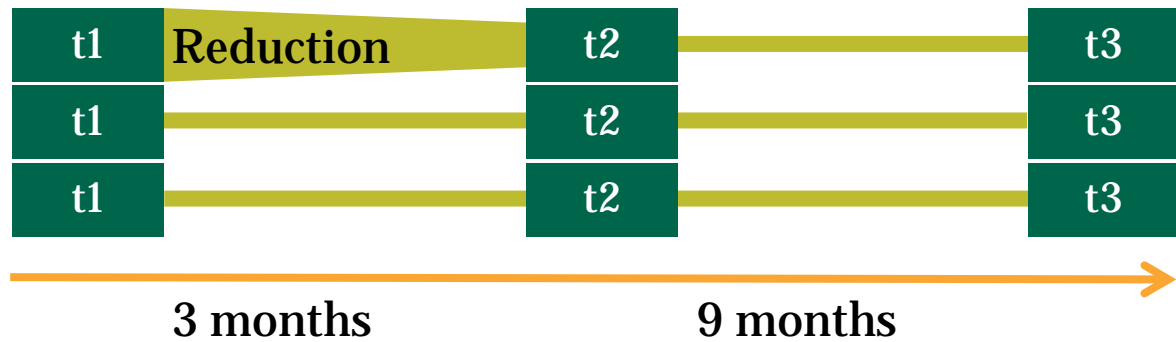


Methods

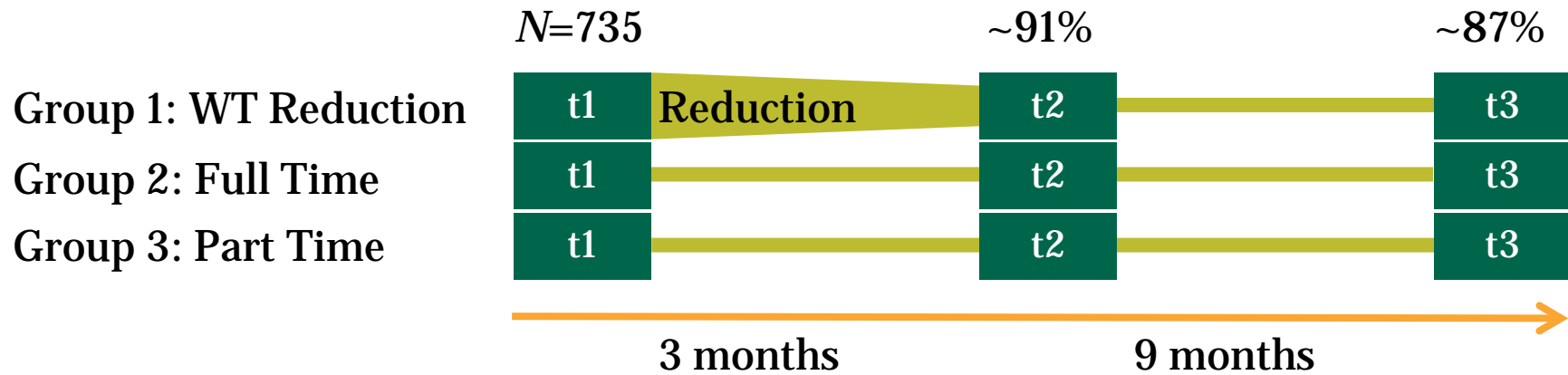
Group 1: WT Reduction

Group 2: Full Time

Group 3: Part Time



Methods



Methods

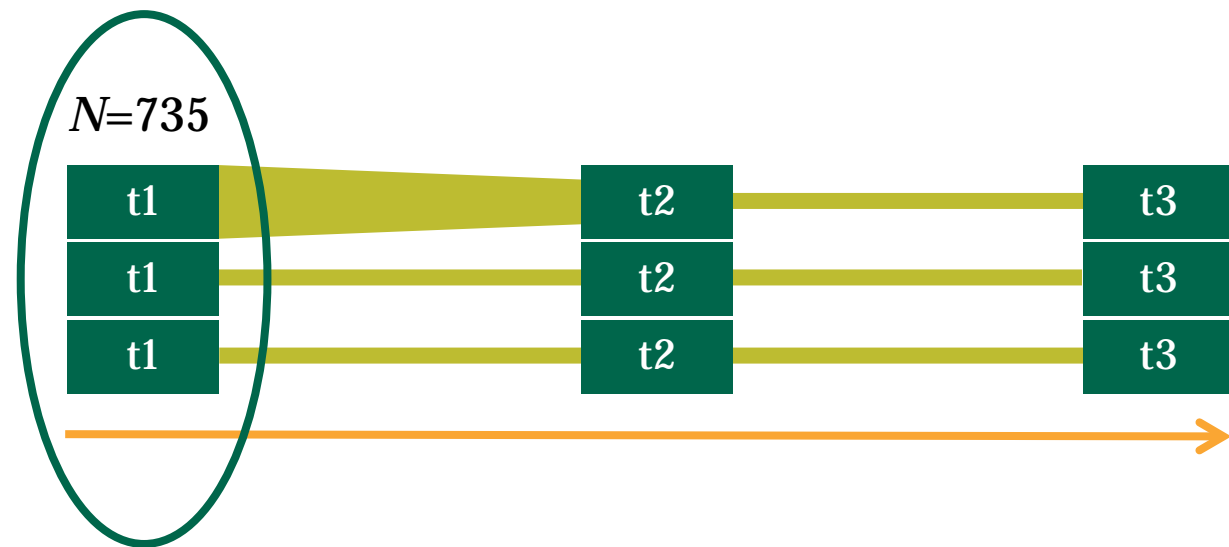
Available Time

Time Affluence

4 Items

„I have had enough time to do the things that are important to me.“

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Pro-environmental Behaviour

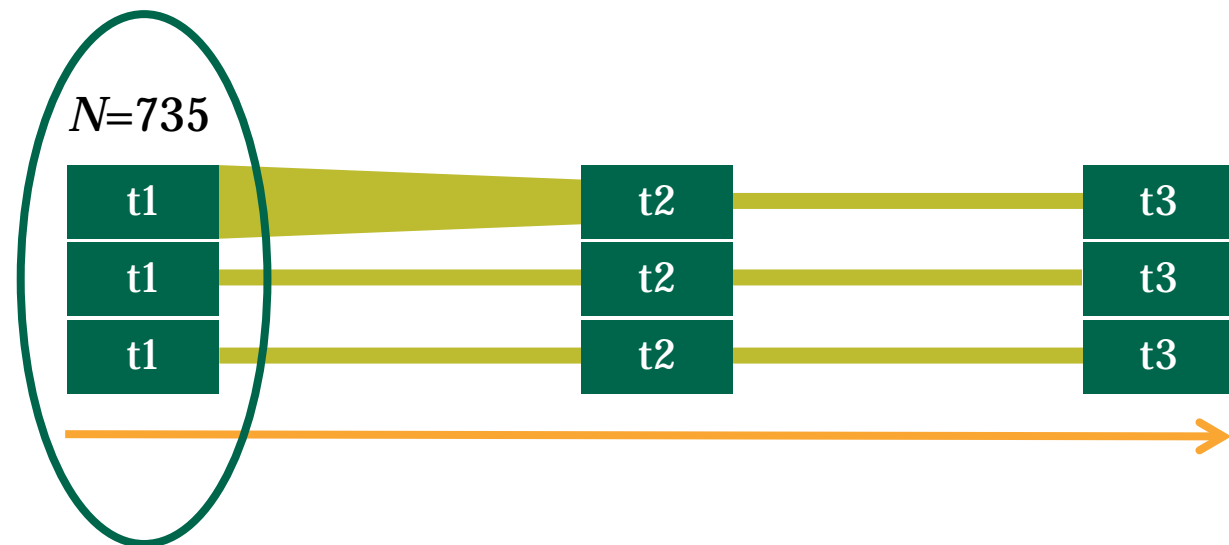
10 Items that reflect

sufficiency, collaborative

consumption & engagement

„If something breaks, I repair it instead of buying a new product.“

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Methods

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Pro-environmental Behaviour

10 Items that reflect sufficiency, collaborative consumption & engagement
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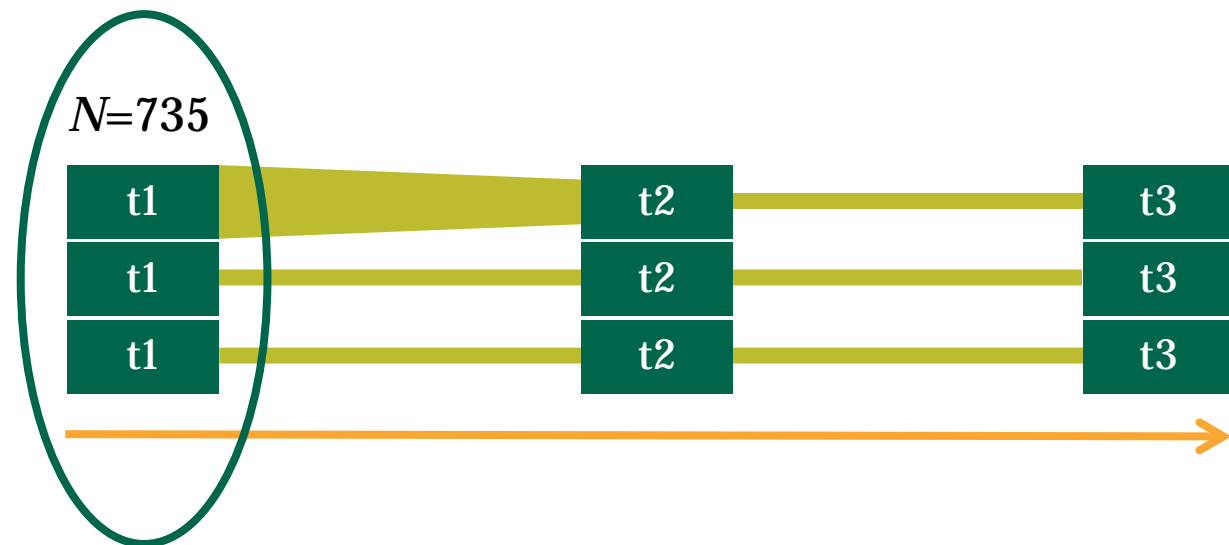
$\alpha=.83$

GHG-Emissions General

WWF Footprint Calculator

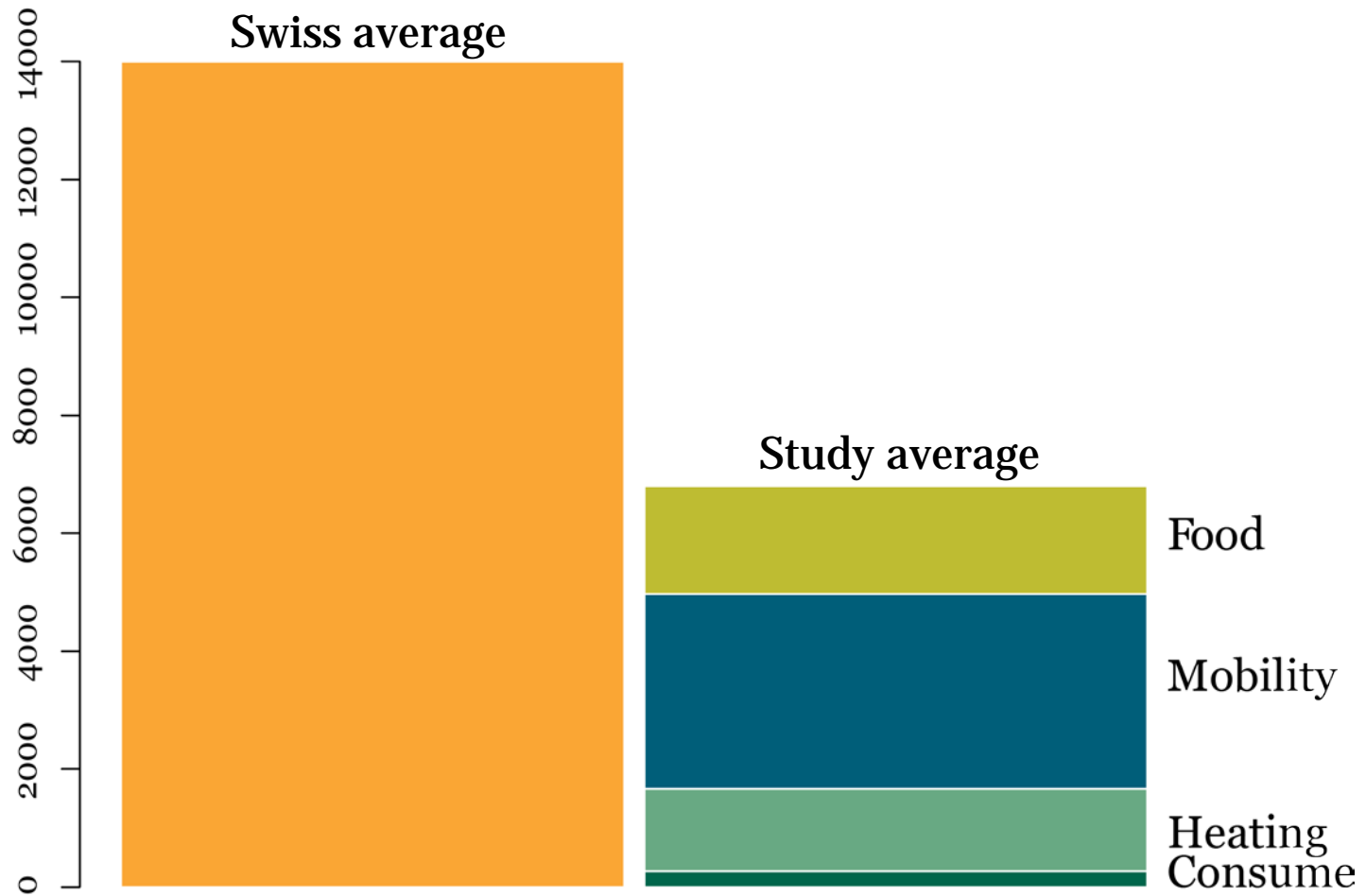
Selection of 9 Items

„How often do you eat meat or fish?“



Results

Average GHG-emissions in kg CO₂-eq./capita & year



Results

Regression Analyses for log-transformed GHG-emissions

DV: log(GHG-emissions)	Model 1 (β)
Age	0.06
Gender (female =1)	-0.01
Household size	-0.20**
Residence (City=1)	-0.14**
Environmental Self-Identity	-0.27**
Materialistic Values	0.12**
Work Hours	0.13**
Adj. R^2	.22
ΔF	29.66**

Results

Regression Analyses for log-transformed GHG-emissions

DV: log(GHG-emissions)	Model 1 (β)	Model 2 (β)
Age	0.06	0.01
Gender (female =1)	-0.01	0.01
Household size	-0.20**	-0.22**
Residence (City=1)	-0.14**	-0.15**
Environmental Self-Identity	-0.27**	-0.26**
Materialistic Values	0.12**	0.12**
Work Hours	0.13**	0.04
Yearly brutto Income		0.15**
Adj. R^2	.22	.23
ΔF	29.66**	11.09**

Results

Regression Analyses for log-transformed GHG-emissions

DV: log(GHG-emissions)	Model 1 (β)	Model 2 (β)	Model 3 (β)
Age	0.06	0.01	0.01
Gender (female =1)	-0.01	0.01	0.01
Household size	-0.20**	-0.22**	-0.22**
Residence (City=1)	-0.14**	-0.15**	-0.15**
Environmental Self-Identity	-0.27**	-0.26**	-0.26**
Materialistic Values	0.12**	0.12**	0.12**
Work Hours	0.13**	0.04	0.04
Yearly brutto Income		0.15**	0.15**
Time Affluence			0.00
Adj. R^2	.22	.23	.23
ΔF	29.66**	11.09**	0.01

Results

Regression Analyses for GHG-emissions of different areas of consumption

Dependent Variable:	log(GHG food)	log(GHG mobility)	log(GHG heating)	log(GHG consumption)
Age	0.05	-0.05	0.13**	0.05
Gender (female =1)	-0.14**	0.03	0.02	0.26**
Household size	0.10*	-0.06	-0.64**	0.00
Residence (City=1)	-0.05	-0.16**	-0.09**	0.02
Environmental Self-Identity	-0.21**	-0.25**	-0.05	-0.15**
Materialistic Values	0.11**	0.10**	-0.01	0.12**
Work Hours	-0.06	0.06	-0.05	0.04
Yearly brutto Income	0.07	0.15**	0.10*	0.17**
Time Affluence	-0.02	-0.01	0.00	0.02
<i>N</i>	713	714	709	714
Adj. <i>R</i> ²	.10	.17	.44	.11
<i>F</i>	10.22**	16.89**	61.84**	10.53**

Results

Regression Analyses for Pro-Environmental Behaviour

DV: PEB	β
Age	0.00
Gender (female =1)	0.07*
Household size	0.10**
Residence (City=1)	0.05
Environmental Self-Identity (ESI)	0.60**
Materialistic Values	-0.18**
Work Hours	-0.01
Yearly brutto Income	-0.06
Time Affluence (TA)	-0.03
Interaction ESI:TA	0.01
Adj. R^2	.51
F	73.48**

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Work hours have a positive influence on GHG-emissions which is fully mediated by income

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Next steps:

- Longitudinal Analyses
- Test other indicators of available time
 - ?

Thank you for your attention!



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Bibliography

- Bruderer Enzler, H., & Diekmann, A. (2019). All talk and no action? An analysis of environmental concern, income and greenhouse gas emissions in Switzerland. *Energy Research & Social Science*, 51, 12–19. <https://doi.org/10.1016/j.erss.2019.01.001>
- Buhl, J., & Acosta, J. (2016). Work less, do less?: Working time reductions and rebound effects. *Sustainability Science*, 11(2), 261–276. <https://doi.org/10.1007/s11625-015-0322-8>
- Frischknecht, R., Nathani, C., Alig, M., Stolz, P., Tschümperlin, L., & Hellmüller, P. (2018). Umwelt-Fussabdrücke der Schweiz. Zeitlicher Verlauf 1996-2015. Bern: Bundesamt für Umwelt.
- Geiger, S. M., Fischer, D., & Schrader, U. (2017). Measuring What Matters in Sustainable Consumption: An Integrative Framework for the Selection of Relevant Behaviors: Measuring Sustainable Consumption. *Sustainable Development*. <https://doi.org/10.1002/sd.1688>
- Hanbury, H., Bader, C., & Moser, S. (2019). Reducing Working Hours as a Means to Foster Low(er)-Carbon Lifestyles? An Exploratory Study on Swiss Employees. *Sustainability*, 11(7), 2024. <https://doi.org/10.3390/su11072024>
- Kasser, T., & Sheldon, K. M. (2009). Time Affluence as a Path toward Personal Happiness and Ethical Business Practice: Empirical Evidence from Four Studies. *Journal of Business Ethics*, 84(2), 243–255. <https://doi.org/10.1007/s10551-008-9696-1>
- Moser, S., & Kleinhüchelkotten, S. (2018). Good Intentions, but Low Impacts: Diverging Importance of Motivational and Socioeconomic Determinants Explaining Pro-Environmental Behavior, Energy Use, and Carbon Footprint. *Environment and Behavior*, 50(6), 626–656. <https://doi.org/10.1177/0013916517710685>
- Pullinger, M. (2014). Working time reduction policy in a sustainable economy: Criteria and options for its design. *Ecological Economics*, 103, 11–19. <https://doi.org/10.1016/j.ecolecon.2014.04.009>

Pictures

Bike: Stanislav Kondratiev (Unsplash)

SUV: Omar Rogue (Unsplash)