Country of Green?
Exploring Environmental Behaviors in Austria

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ABSTRACT:
This poster reports the results of a national survey aimed at investigating pro-environmental behaviors (PEB) of Austrian citizens in the consumption contexts of food, mobility, energy and conservation. Data was collected through an online survey with a representative sample of the Austrian adult population in October 2014. The empirical analysis reveals that PEB in the context of mobility is not substantially correlated with PEB in food, energy and conservation. When looking more closely at mobility behavior, one finds a negative correlation with age and a positive correlation with size of place of residency. However, if one accounts for interaction effects, the effect of age on mobility behavior disappears for small and medium-sized cities but remains significant for large cities. On a methodological level, the study reflects on the use of PEB as a one-dimensional concept to measure people´s self-reported pro-environmental behaviors. From an empirical perspective, the study provides insights into the degree of PEB adoption among Austrian citizens.

1 INTRODUCTION

Since the World Commission on Environment and Development published its report “Our Common Future” in the late 1980s, consumption patterns in industrialized countries have become a critical aspect in the debate about sustainable development [1] and, in the new millennium, “Sustainable Consumption” has been manifested as a core policy objective in national and international arenas [2]. While some suggestions for moving the economy onto more sustainable paths focus on increased efficiency of production processes and the development of “greener products” through ecological modernization and technological innovation (e.g. [3], [4], [5]), it has become increasingly clear that significant changes in behaviors and lifestyles are vital to achieve long-term economic prosperity and social justice within ecological limits [6].

Scholars from various academic disciplines have studied the individual adoption of pro-environmental behaviors (PEB) in various European countries (e.g. [7], [8]); some have also looked at the relation of PEB to attitudes [9], values [10] [11], worldviews [12], social norms [13] as well as institutional and economic incentives and constraints [14]. This poster reports the preliminary findings of a survey study that has investigated pro-environmental behaviors among a representative sample of the Austrian adult population.

2 STUDY DESIGN

Data was collected via an online survey in October 2014 by a marketing research company. In total, 524 people participated in the study; the mean age was around 46 years. The questionnaire asked about respondents´ self-reported behaviors in four consumption contexts, namely mobility, food, energy, and conservation (22 items in total); respondents indicated to what extend they performed a specified behavior, ranging from “(hardly) ever” to “(almost) always”.

In order to reduce dimensionality, we follow the common approach to additively aggregate the (potentially reversed) individual items to four indices: MO (mobility), FO (food), EN (energy), and CO (conservation). Furthermore, we rescale so that each index varies between 0 and 100.

3 FINDINGS

The empirical analysis reveals that the four indices are positively correlated, with the exception of MO which is hardly correlated with the other three indices (illustrated in the left panel in Figure 1). This speaks against the assumption that PEB can be represented as a one-dimensional concept as often assumed in the literature.

Furthermore, it is interesting to note that average MO scores differ significantly with respect to size of the place of residency. Respondents from larger places of residency tend to have higher MO scores ($p<0.0001$). Another significant explanatory variable is age; older respondents tend to have lower MO scores ($p=0.00217$). However, if one accounts for interaction effects, the effect of age on MO disappears for small and medium-sized cities but remains significant for large cities. The latter is obviously due to a cluster of "young urbanites" that stands out in the top left part of the right panel in Figure 1.

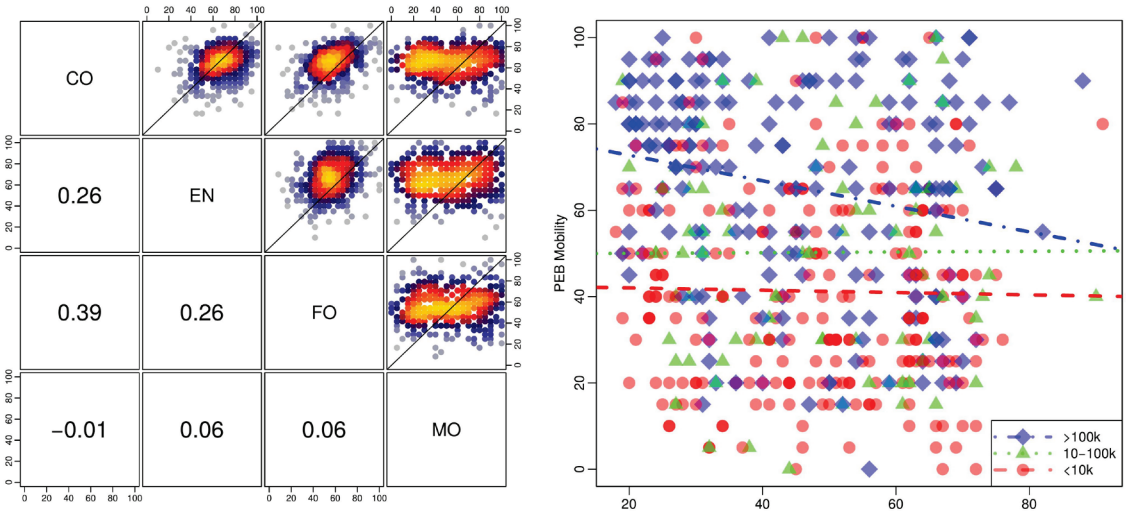

Figure 1. Left: Pairwise scatterplots between context-specific PEB indices and Pearson correlation coefficients. Right: Scatterplot of age against MO with OLS regression lines.

Table 1. Linear regression OLS estimates; small place of residency acts as baseline (R^2 =0.194).

Coefficients	Estimate	Std. Error	t-value	p-value
(Intercept)	42.54	4.84	8.78	<0.0001
Age	-0.03	0.10	-0.28	0.7789
MediumDummy	7.31	9.33	0.78	0.4337
LargeDummy	36.13	6.72	5.37	<0.0001
Age*MediumDummy	0.03	0.18	0.19	0.8493
Age*LargeDummy	-0.27	0.14	-1.97	0.0499

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