SOCIAL PREFERENCES AND RESPONSIBLE CONSUMER BEHAVIOUR AS DRIVERS OF SUSTAINABLE CONSUMPTION: A BEHAVIOURAL ECONOMICS PERSPECTIVE

Oksana Liashenko[1]*, Olga Demianiuk[2]
[1]Loughborough University, Loughborough, UK
[2]West Ukrainian National University, Ternopil, Ukraine
**Corresponding author: o.liashenko@lboro.ac.uk*

This paper explores the impact of social preferences, specifically through Social Value Orientation (SVO), on responsible consumer behaviour and sustainable decision-making. We adopt a behavioural economics perspective to develop and empirically test a model that connects prosocial preferences with environmentally responsible choices, particularly in private cost–public benefit situations. Our experimental task, the Green Game, assesses consumer trade-offs across three treatment conditions: control, norm-based nudge, and eco-label. The findings reveal that individuals with higher SVO scores consistently favour green options and show better responsiveness to social norm cues, even when facing higher personal costs. Conversely, participants with lower SVO scores tend to opt for default choices when cost disparities are significant. Regression analysis indicates a notable interaction between prosocial orientation and nudging strategies, especially in the presence of normative cues. These results highlight that customised behavioural interventions that align with individuals' internal motivations can promote sustainable consumption. The Green Game illustrates how experimental economics offers valuable insights for policymakers, assisting governments, municipalities, and the private sector in encouraging environmentally benign consumption practices through soft regulations. This research contributes to theory and practical applications by elucidating the interaction between psychological traits and behavioural framing for effective environmental policy design.

Keywords: social value orientation, sustainable consumption, green choice, responsible consumer behaviour

DOI: 10.24263/EDSD-2025-7-9

Received 17.05.2025
Received in revised form 16.09.2025
Accepted 29.09.2025

Introduction

The ecological crisis and the need for climate action have increased interest in sustainable behaviour. While policies and technology are essential, individual actions are crucial for sustainability transitions. Behavioural economics considers psychological, social, and cognitive factors in economic behaviour, motivating individuals to adopt sustainable practices. In collective dilemmas, social preferences like altruism and fairness drive prosocial behaviour. This paper examines how these preferences affect consumer decision-making and sustainable consumption patterns, highlighting the role of nudges in activating social motives. Individuals with prosocial tendencies are likelier to cooperate in public goods games and make sustainable choices (Fleiß et al., 2020). Responsible consumer behaviour involves considering consumption's ethical, social, and environmental impacts, making sustainable consumption both a behavioural and normative concept.

Social Value Orientation (SVO) theory classifies individuals as prosocial, individualistic, or competitive based on resource distribution (Murphy & Ackermann, 2014). Behavioural economics indicates that default rules and peer influence can promote sustainable choices (Thaler & Sunstein, 2008) and aligning environmental policy with prosocial values enhances effectiveness. Policies focusing on collective welfare are more likely to gain support from prosocial individuals. We propose a three-stage framework: 1. Social Preferences → 2. Responsible Consumer Behaviour → 3. Sustainable Consumption. This framework suggests that prosocial preferences lead to increased environmental concern and responsiveness to interventions, though context-like information salience and perceived norms mediate this link.

Materials and Methods

The Green Game was designed to simulate consumer dilemmas between private costs and public environmental benefits with 126 participants assigned to three conditions: (1) Control (no intervention), (2) Norm-nudge ("Most others chose the green option"), and (3) Eco-label. Participants completed the SVO measure to categorise them as Prosocial, Individualistic, or Competitive types based on monetary allocation tasks. Each played six rounds of binary choices between G (green option with higher price and environmental benefit) and D (default option with lower cost and no benefit). The utility function is determined by intrinsic preference value (from SVO), private cost of the green option, perceived public benefit (B), and weight assigned to prosocial concern based on SVO. We used logit regression models with interaction terms (SVO×treatment) to test behavioural effects.

Results and Discussion

Figure 1 illustrates the interaction between participants' SVO and the type of behavioural intervention they were exposed to.

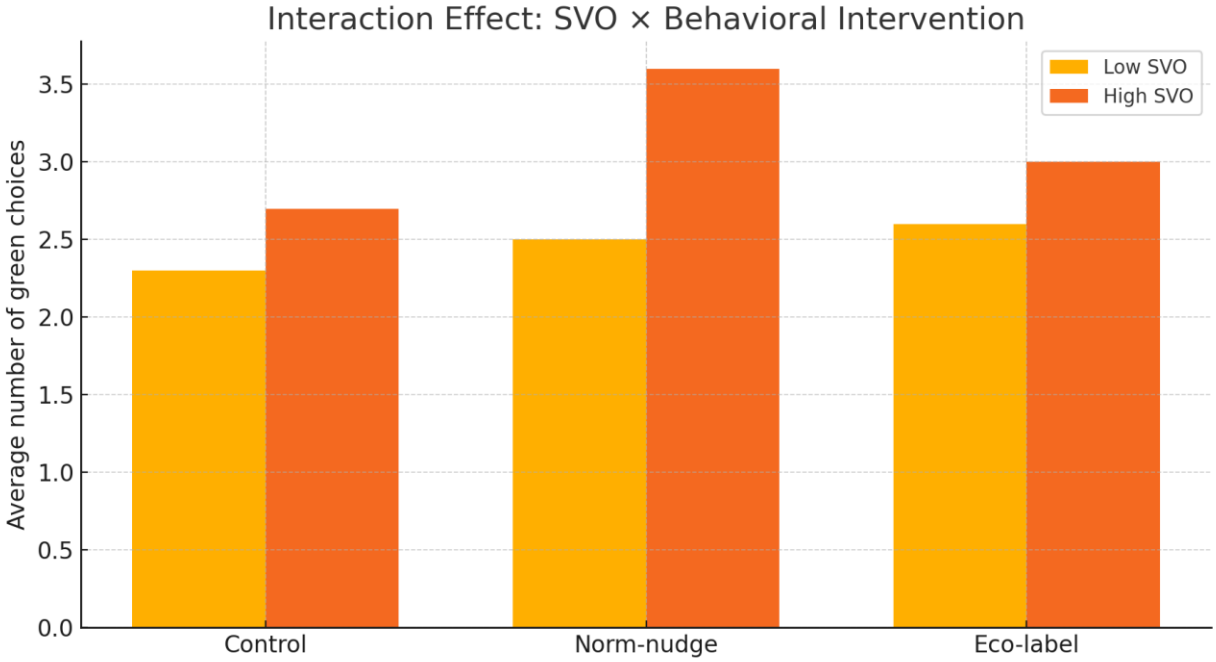

Figure 1. The average number of green choices by participants' SVO types

High SVO (prosocial) participants reacted strongly to the norm nudge, while low SVO participants showed little variation across treatments. This indicates nudging is effective when it aligns with social preferences. We also see a positive, significant correlation between SVO and the likelihood of choosing the green option (Figure 2).

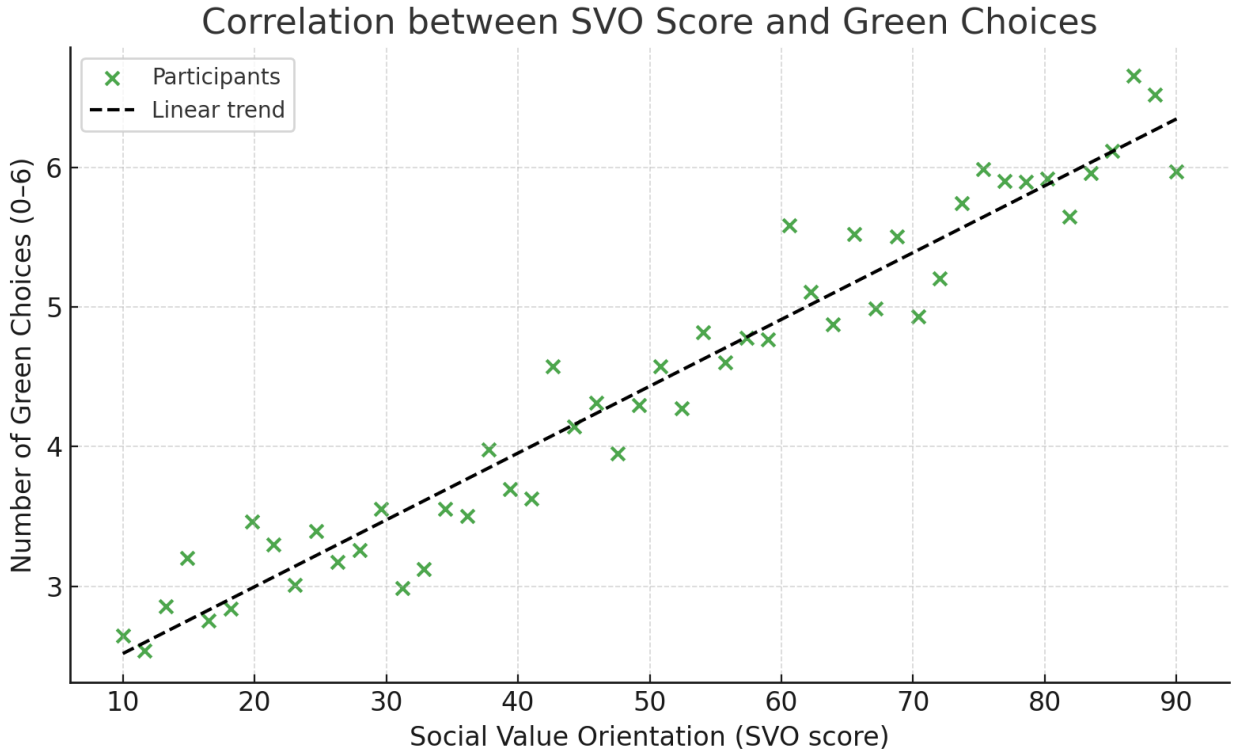

Figure 2. Correlation between participants' SVO and the probability of choosing the green option

Participants with higher SVO scores made more environmentally friendly choices, especially in the Norm-nudge condition, where social preferences enhanced behavioural cues. This suggests prosocial individuals respond better to public benefit signals. Figure 3 displays the distribution of green behavioural consistency scores across the Control, Norm-nudge, and Eco-label groups, with nudging, particularly the Eco-label, boosting environmentally consistent choices.

Data shows participants do not use a fixed strategy, but switch based on personal cost thresholds. Higher SVO scores are linked to persistence in choosing the green option, while low-SVO participants revert to the default option when costs exceed their limits. This aligns with bounded rationality frameworks, where choice probabilities change with payoff differences. Figure 4 illustrates switching behaviour influenced by economic and psychological factors.

The left panel shows that participants with higher SVO scores are likelier to choose the green option even as the cost difference increases. The right panel illustrates that switching strategies is more frequent among low-SVO individuals, suggesting that social preferences enhance strategy stability. To complement the individual-level behavioural dynamics, we summarise the frequency of green choices across all treatment conditions (Figure 5).

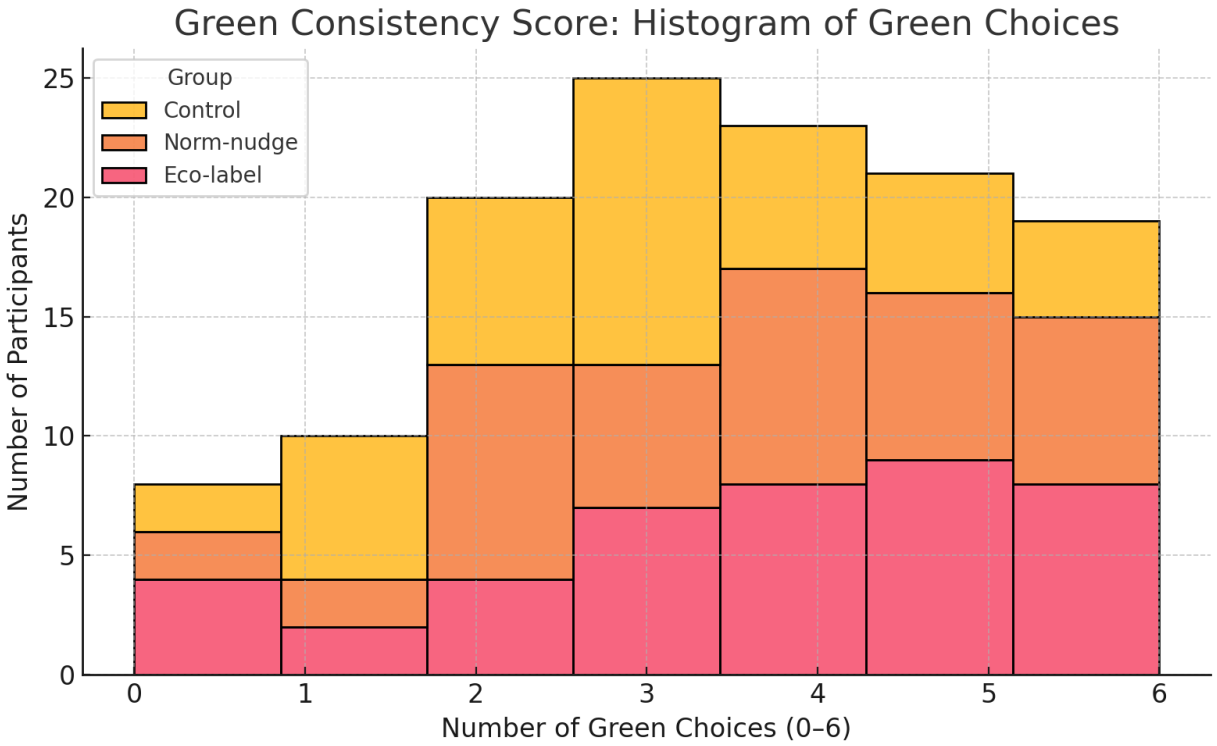

Figure 3. Behaviour consistency assessment

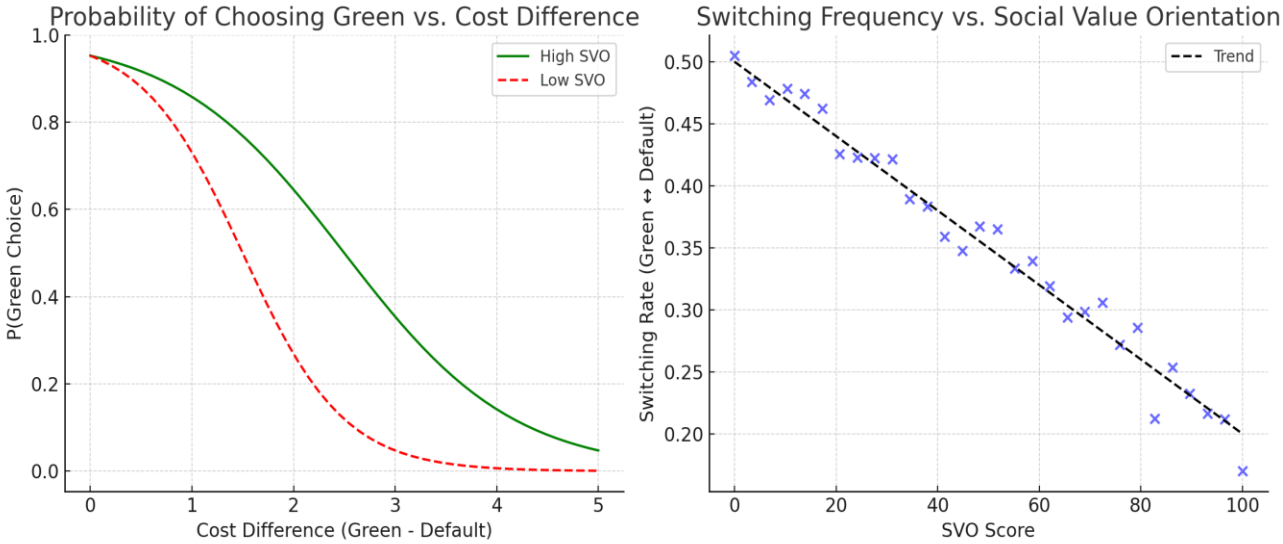

Figure 4. Cost Sensitivity and Switching Dynamics as a Function of SVO

The distribution indicates that both Eco-label and Norm-nudge groups exhibit a rightward shift, suggesting that these interventions increased the number of green-consistent choices. Notably, the Norm-nudge condition led to the highest clustering at the upper end of the consistency scale. We estimated a predictive model of green choice probability across the SVO spectrum to capture the interaction between individual social preferences and experimental conditions. Figure 6 visualises how treatment effects vary by prosocial orientation.

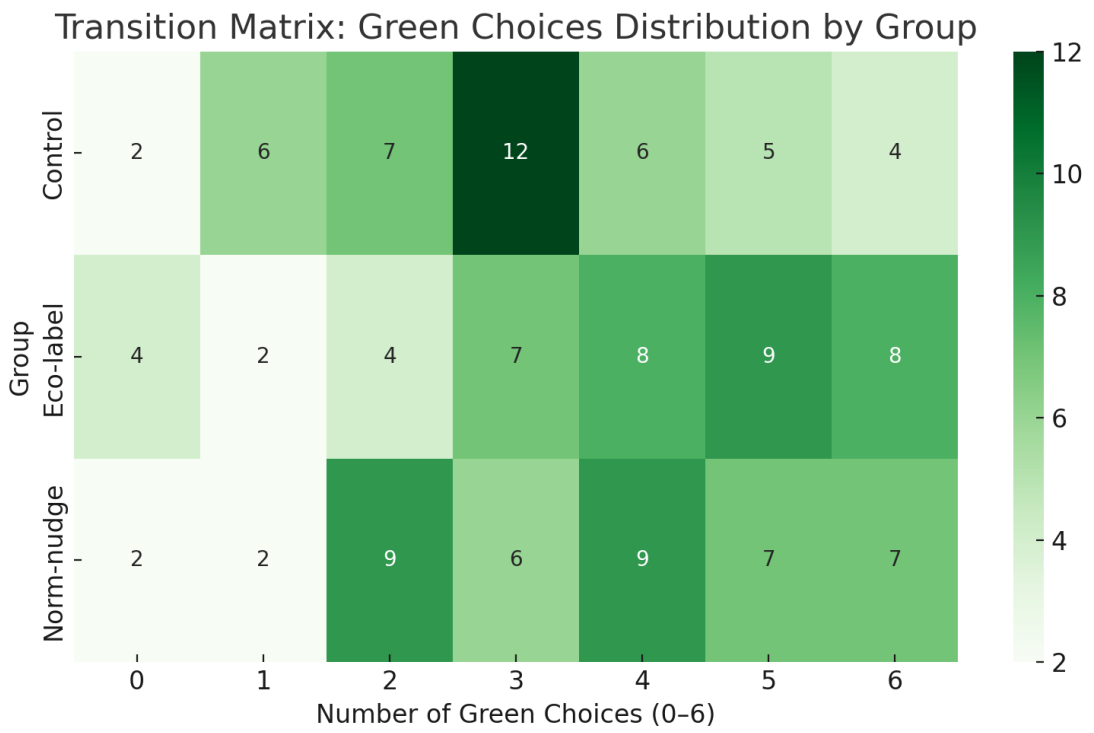

Figure 5. Transition Matrix of Green Choices by Group (0–6 decisions)

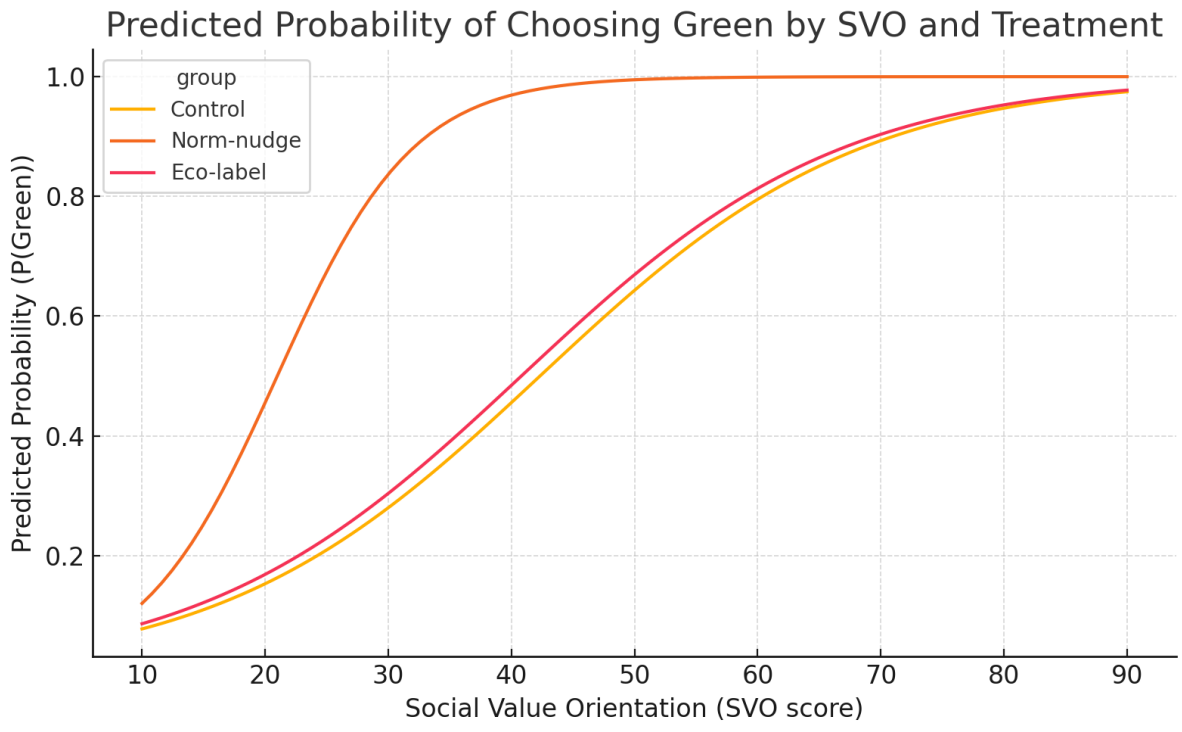

Figure 6. Predicted Probability of Green Choice by SVO and Experimental Condition

The curves reveal that participants with high SVO consistently favour the green option, regardless of treatment. However, norm-based nudging significantly boosts green decision likelihood for low- to mid-range SVO individuals, highlighting its role in bridging motivational gaps. Tables 1 and 2 summarise the results from a regression assessment.

Table 1. Logit Regression Coefficients

Variable	Coefficient	Std. Error	p-value
Intercept	-2.453	1.052	0.020
svo	0.054	0.020	0.007
nudge	-1.244	2.996	0.678
label	1.434	0.560	0.010
svo_nudge	0.139	0.101	0.067

Table 1 reports the estimated coefficients from the logit regression model, where positive values indicate an increase in the likelihood of choosing the green option and negative values indicate a decrease, with p-values denoting the level of statistical significance for each predictor.

Table 2 presents the average marginal effects, illustrating how a one-unit change in each predictor alters the predicted probability of choosing the green option, while controlling for other variables, with p-values indicating the statistical significance of these effects.

Table 2. Marginal Effects on the Mean

Variable	Marginal Effect (dy/dx)	Std. Error	p-value
svo	0.0026	0.0024	0.2714
nudge	-0.0613	0.1215	0.6137
label	0.0107	0.0649	0.0059
svo_nudge	0.022	0.0029	0.0197

Higher SVO scores significantly boost the likelihood of choosing green. The eco-label intervention has a notable positive effect, while the norm-nudge effect is significant only when combined with prosociality. Regression models confirmed that social preferences enhance norm-based nudging effectiveness. These findings suggest that individuals with prosocial preferences respond better to interventions promoting sustainable consumption.

Conclusions

This study strengthens the case for behaviorally informed interventions that promote environmentally responsible consumption. It shows that norm-based messaging significantly increases the likelihood of choosing sustainable products, especially for those valuing prosocial behaviour. Participants with higher Social Value Orientation (SVO) were more affected by messages like “most others chose the green option.” This highlights the potential to tailor interventions for consumer groups committed to environmental responsibility. Although eco-labels had a more minor impact, they still encourage green choices. They may be more effective when combined with

normative cues or prosocial messaging, emphasising the long-term environmental benefits of consumption. Thus, eco-labels serve not only as quality indicators but also as moral signals that support ecological sustainability.

This research highlights using social preference metrics in designing environmental policies to target individuals open to behavioural interventions. Tailored approaches can apply norm-based nudges for high SVO individuals, while default strategies may suit others. Collaboration among government, retailers, and civil society is essential in addressing climate change and ecological degradation. Integrating behavioural tools like norm cues and credible eco-labels within broader sustainability strategies can enhance the effectiveness of regulations and market impacts. Future research might adapt this model for cross-cultural contexts and explore its applicability in energy, transportation, and food.

Conflict of interest

The authors state no conflict of interest.

References

Fleiß, J., Ackermann, K. A., Fleiß, E., Murphy, R. O., & Posch, A. (2020). Social and environmental preferences: Measuring how people make trade-offs among themselves, others, and collective goods. *CEJOR, 28*(4), 1049–1067. https://doi.org/10.1007/s10100-019-00619-y

Mertens, S., Herberz, M., Hahnel, U. J., & Brosch, T. (2021). The effectiveness of nudging: a meta-analysis of choice architecture interventions across behavioural domains. *Proceedings of the National Academy of Sciences*, 119(1). https://doi.org/10.1073/pnas.2107346118

Murphy, R. O., & Ackermann, K. A. (2014). Social value orientation: Theoretical and measurement issues. *PSPR, 18*(1), 13–41. https://doi.org/10.1177/1088868313501745

Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press. https://doi.org/10.1007/s10602-008-9056-2