

Uncovering the Effects of Attribute Translations in the Energy Domain

Stephanie Mertens, Ulf J. J. Hahnel, & Tobias Brosch – Swiss Center for Affective Sciences, University of Geneva, Switzerland

BACKGROUND

Consumers tend to overlook personally relevant objectives when making decisions¹. Translating product characteristics into a variety of related attributes may help consumers overcome this tendency by providing decision signposts that (1) activate latent personal objectives, and (2) direct towards choice options that are most congruent with these objectives².

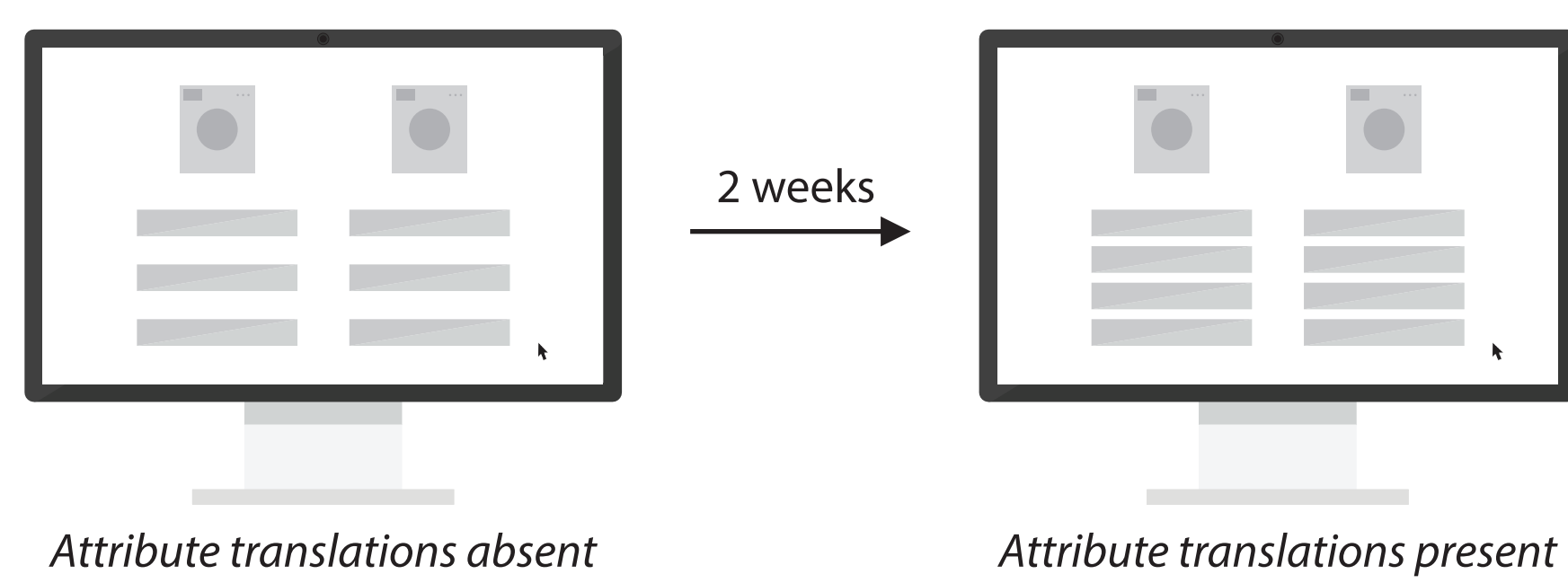
How do attribute translations affect purchase decisions?

The aim of the current study was to investigate the basic principles underlying the effects of attribute translations on purchase decisions in the energy domain. To this end, we compared the behavioral and cognitive effects of different types and formats of attribute translations on individuals' decision making.

METHODS

General procedure

Participants engaged twice in a series of choices between two washing machines. Choice options were first described in terms of their price, energy and water consumption, and popularity. In a second session, the same product descriptions were then complemented by attribute translations. Using the process tracing tool MouselabWEB³, participants' choices along with the duration and frequency of each attribute inspection were recorded. This information was used as a proxy measure for the attention participants directed towards each product attribute.



Type of translation of energy and water consumption

- » Economic interest: operating costs
- » Environmental interest: carbon emissions, rating of environmental friendliness

Number of attribute translations

- » Number of superior product attributes unbalanced vs. balanced

RESULTS

BEHAVIORAL EFFECTS

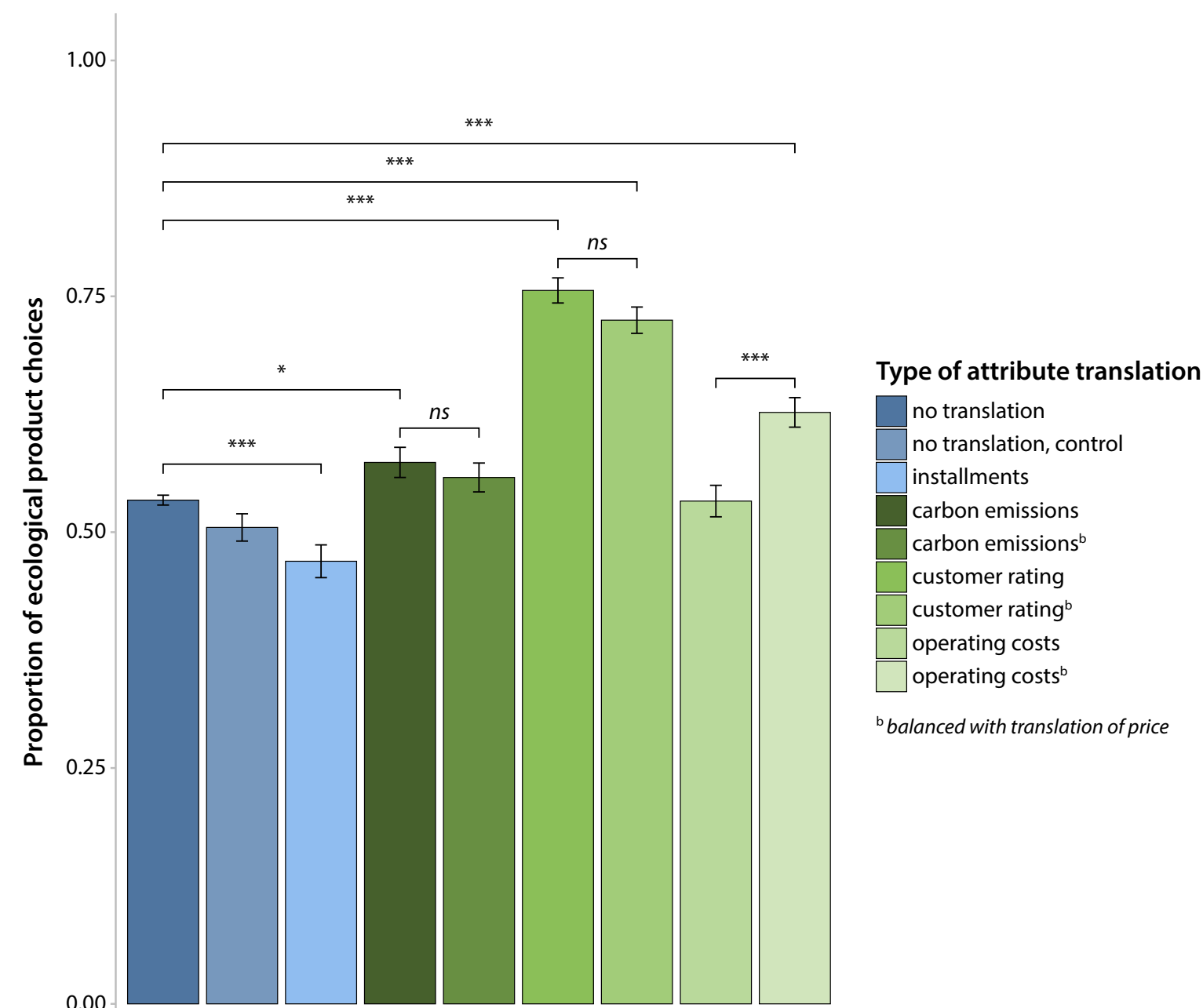


Figure 1. Proportion of ecological product choices in absence and presence of various translations of energy and water consumption.

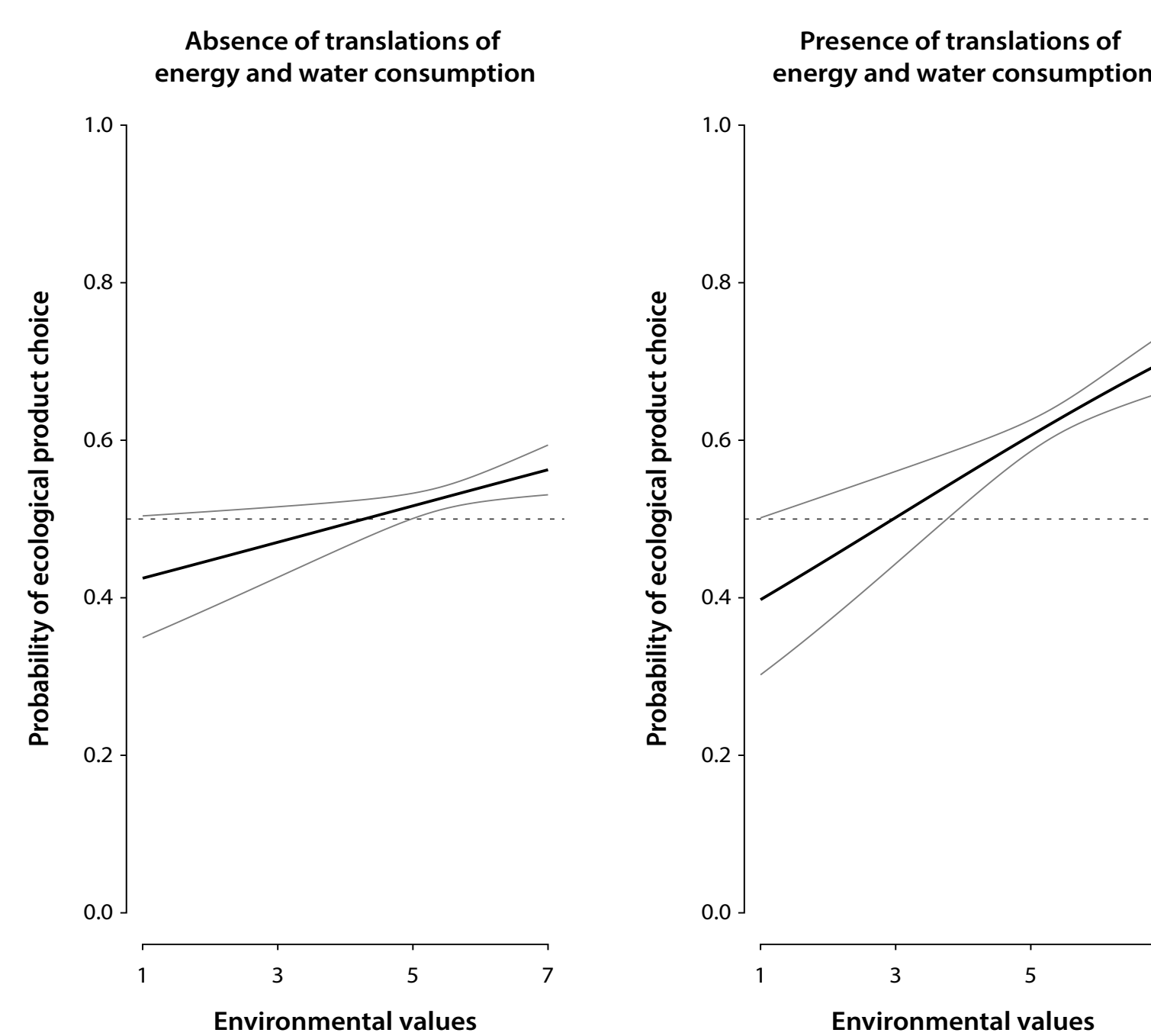


Figure 2. Probability of ecological product choice as a function of environmental values in the absence and presence of attribute translations.

COGNITIVE EFFECTS

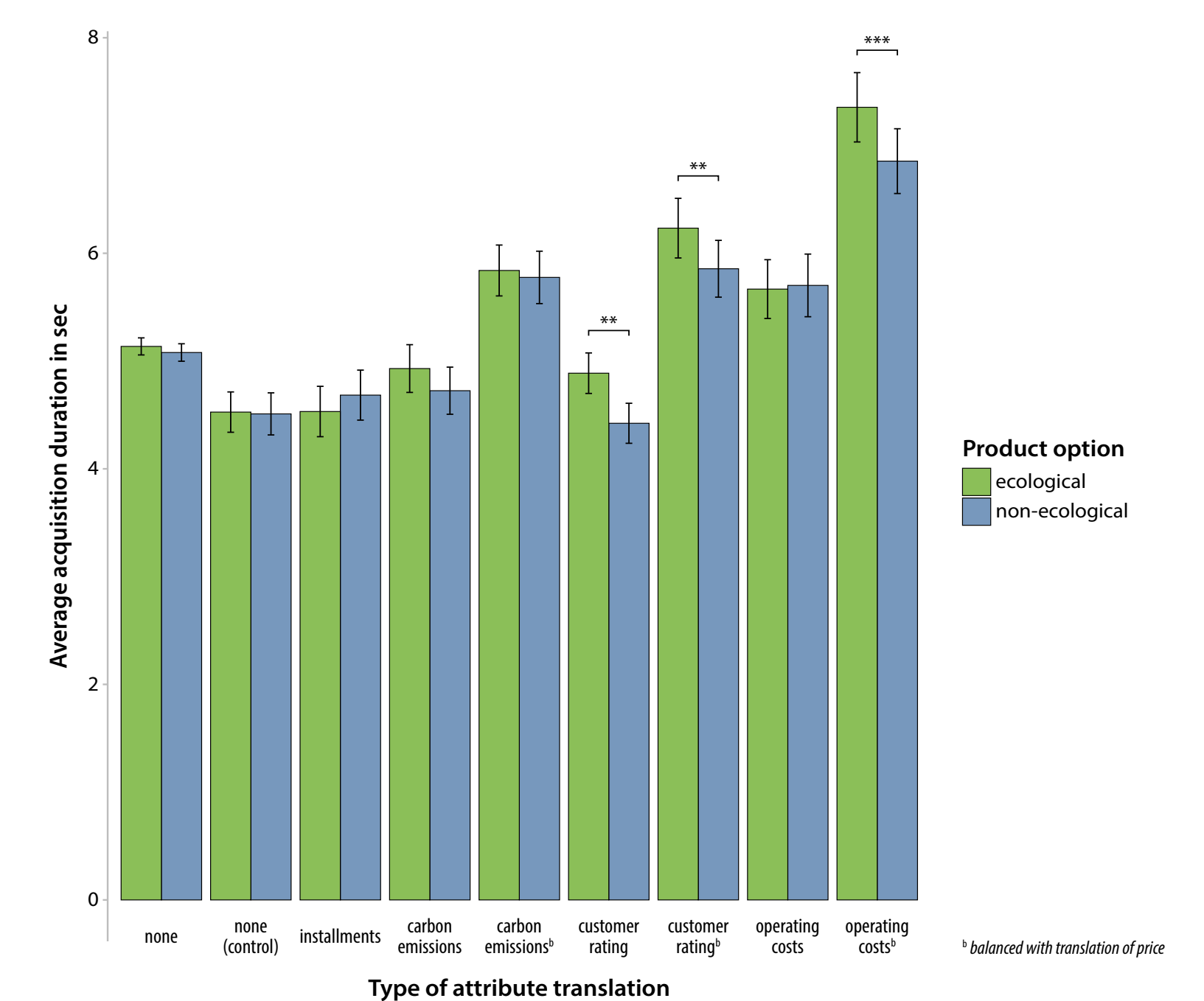


Figure 3. Average acquisition duration for non-ecological and ecological product options as observed for each type of attribute translation.

DISCUSSION

Attribute translations effectively guide consumers towards purchase decisions that are in line with their values and objectives, supporting the proposition of a signpost effect². This effect seems to stem from changes in individuals' information acquisition processes, which direct attention towards choice options that are most congruent with individuals' objectives. The type of attribute translations appears to play a crucial role in eliciting both behavioral and cognitive effects, while the mere number of superior product attributes in the presence of attribute translations appears to be less relevant.

Future research will further disentangle the behavioral and cognitive effects of different presentation formats of attribute translations, such as the difference between numeric and evaluative information.

REFERENCES

- ¹ Bond, S. D., Carlson, K. A., & Keeney, R. L. (2008). Generating objectives: Can decision makers articulate what they want? *Management Science*, 54(1), 56–70.
- ² Ungemach, C., Camilleri, A. R., Johnson, E. J., Larrick, R. P., & Weber, E. U. (2017). Translated attributes as choice architecture: Aligning objectives and choices through decision signposts. *Management Science, Articles in Advance*, 1–15.
- ³ Willemsen, M. C., & Johnson, E. J. (2011). Visiting the decision factory: Observing cognition with MouselabWEB and other information acquisition methods. In M. Schulte-Mecklenbeck, A. Kühberger, & R. Ranyard (Eds.), *A handbook of process tracing methods for decision research* (pp. 21–42). New York, NY: Psychology Press.

