



Social and behavioral science for energy communities and collective actions

Methods and results from DECIDE

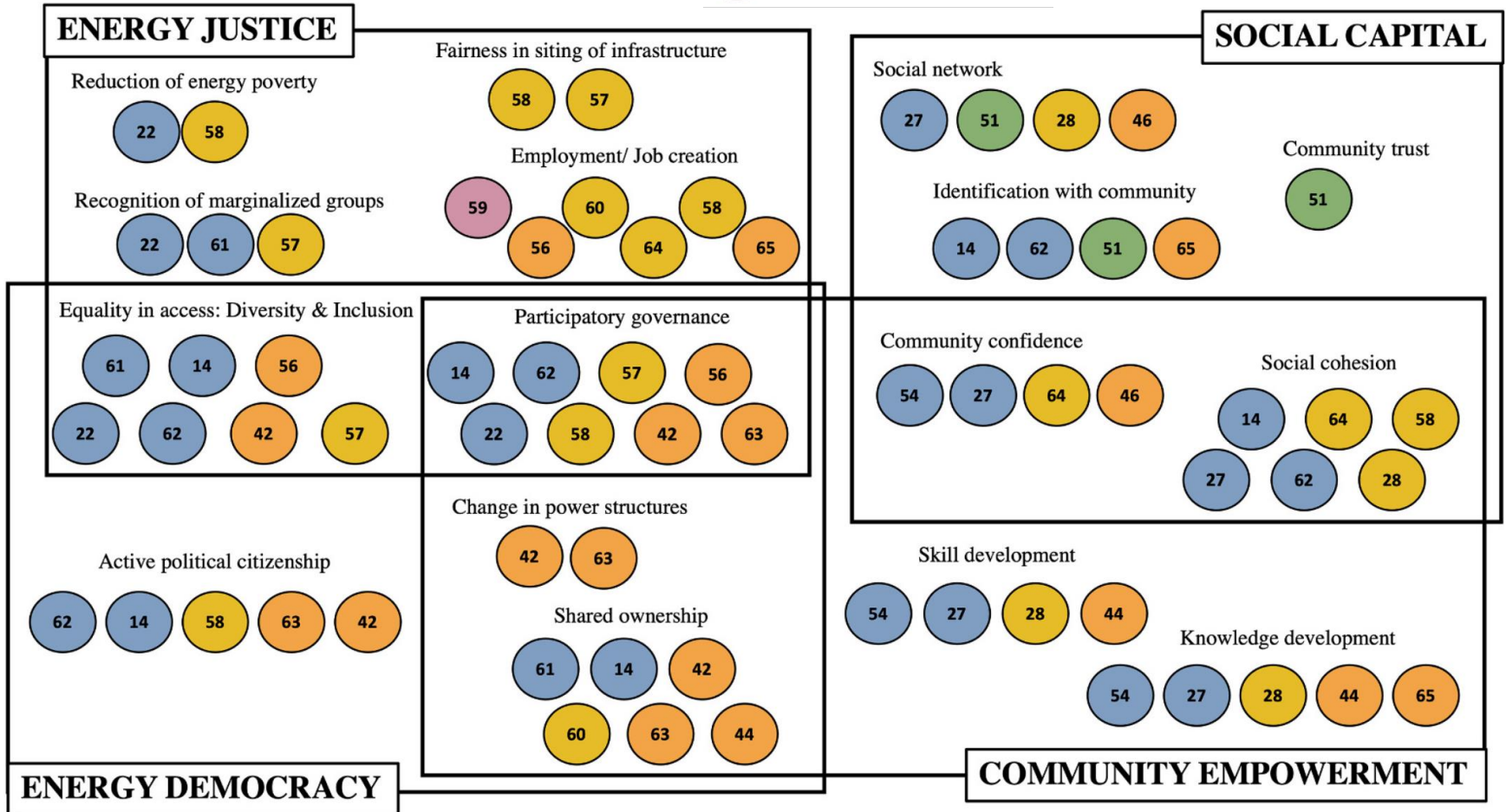
Mona Bielig (University of Seeburg)

Prof. Dr. Florian Kutzner (University of Seeburg)

26.01.2023

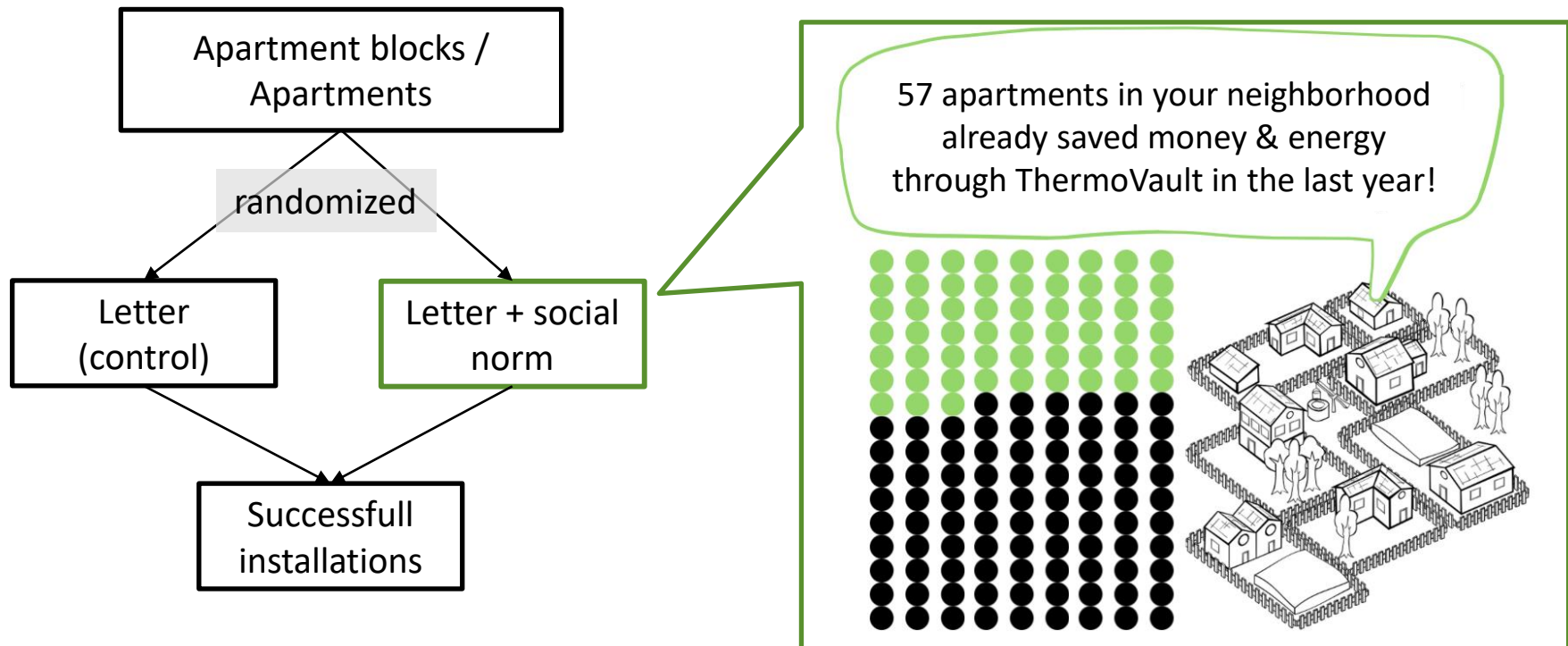
We miss experimental evidence!

- Case Studies
- Qualitative Research
- Data Analysis & Statistics
- Survey & Data Collection
- Experiments and quasi-experiments



Social norm intervention in social housing

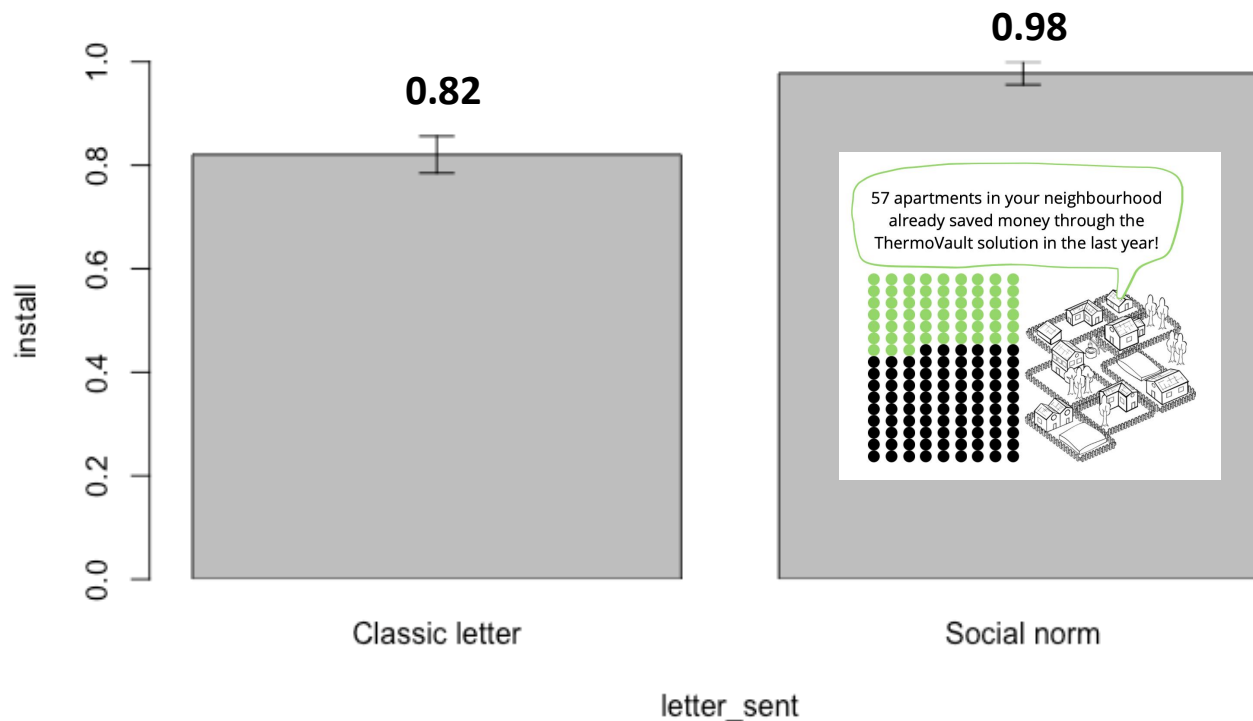
Context: Technology rollout in social housing context, together with ThermoVault
 Two studies, in two different social housing companies



Social norm intervention - results

Trial 1 (pre-study), N = 247

- A significant higher uptake for the social norm letter was found ($\beta = 1.7, p = .024$)
- BUT: randomization occurred only at apartment block level

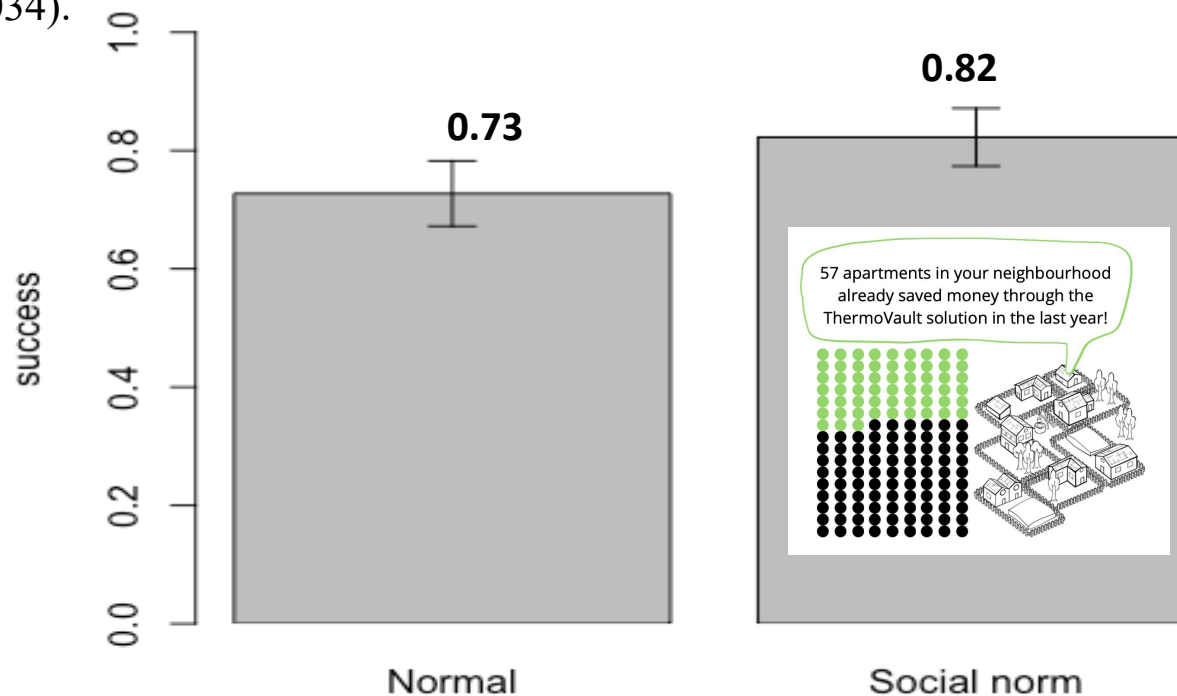


Social norm worked better!

Social norm intervention - results

Trial 2 (full study), N = 128

- Randomization on apartment level, in four different apartment blocks
- Significant main effect ($\beta = 1.62, p = .02$) of social norm, when taking into account a significant interaction between social norms and one of the housing blocks ($\beta = -2.2, p = .034$).



Social norm worked better!

What did not work?

Trial with a 2x2 design (trust x collective efficacy) in another social housing company

TRUST

60%



The ThermoVault solution has reduced my energy bills a lot.

30%



ThermoVault has allowed my bill to decrease a limited amount despite rising energy prices

10%



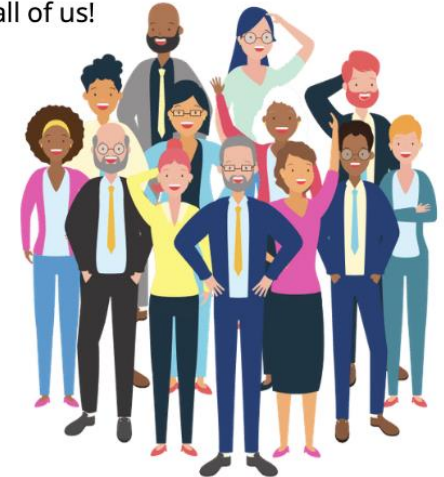
The additional comfort has allowed me to take longer showers, my energy bill has increased by a limited amount as a result

COLLECTIVE EFFICACY

Together, we can make a difference.

Through ThermoVault, we as the **WoninGent Community** save a meaningful amount of energy costs and CO2 Emissions.

For all of us!



Postcard experiment to gain prosumers for an Energy Cooperative



1
→

ourpower
DIE ENERGIE COOPERATIVE

MITGLIED WERDEN STROM KAUFEN **STROM VERKAUFEN** NEWS ÜBER UNS LOGIN

**STROM DIREKT AN
FREUNDE UND NACHBARN
VERKAUFEN!**

2
→

Jetzt Erzeuger*in Deiner Region werden und von der OurPower-Community profitieren!



Wir erledigen Deinen
Stromwechsel



Individueller dauerhaft
fairer Preis

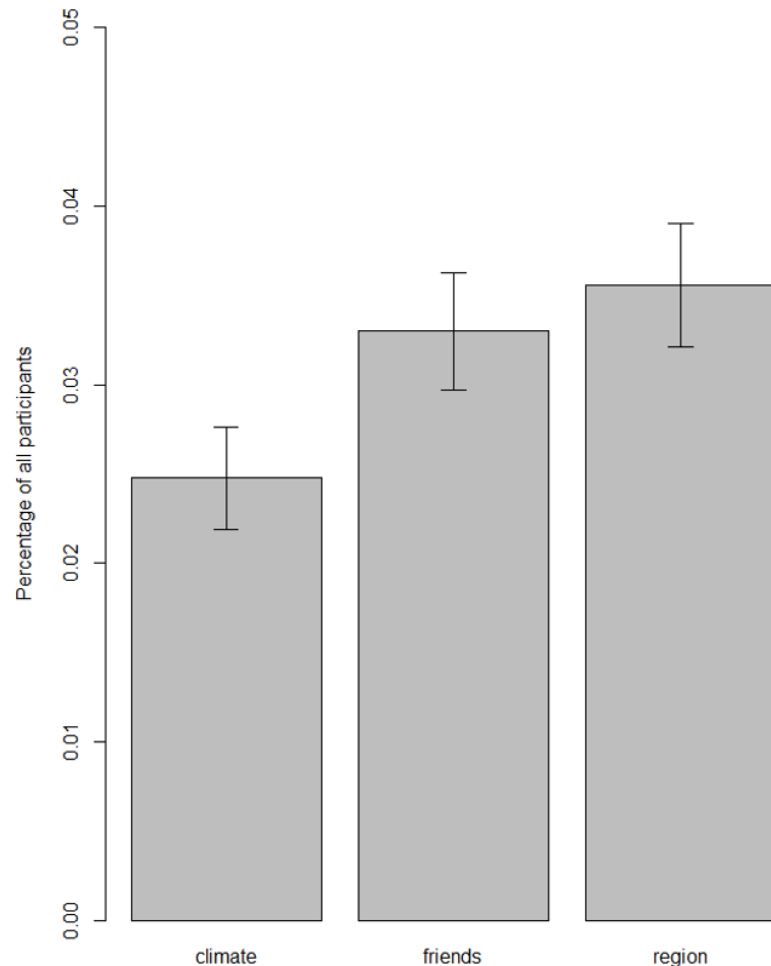


Wir sind eine
gemeinwohlorientierte
Genossenschaft

LOSLEGEN UND JETZT STROM VERKAUFEN

Postcard Experiment for prosumers - results

To which postcard do prosumers react most likely?



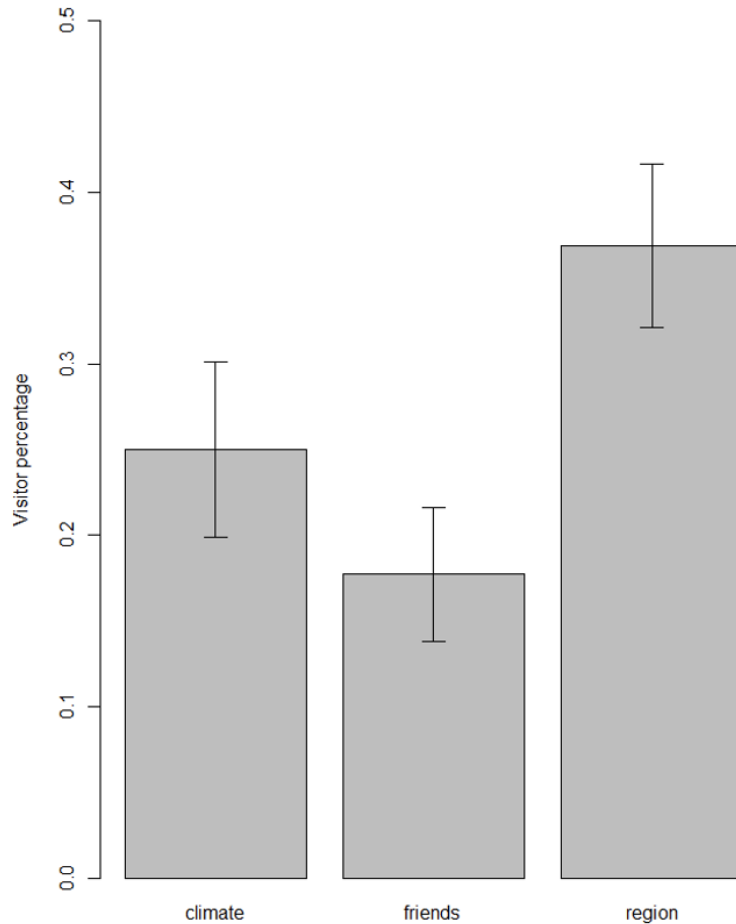
Compared to the *Climate* condition, participants in the *Region* condition were more likely to visit the website (OR = 1.45, p = 0.016). No significant difference to ‘friends’ group, although the effect is in the same direction.

Region performed best!



Postcard Experiment for prosumers - results

Which postcard & landing page lead to more interest?



Participants who were in the *Region* condition were most likely to click-through on the website, with participants in the *Friends* condition about three times less likely to do so, $OR = 0.37$, $p = 0.003$. The difference to ‘Climate’ was not significant, but the effect was in the same direction.

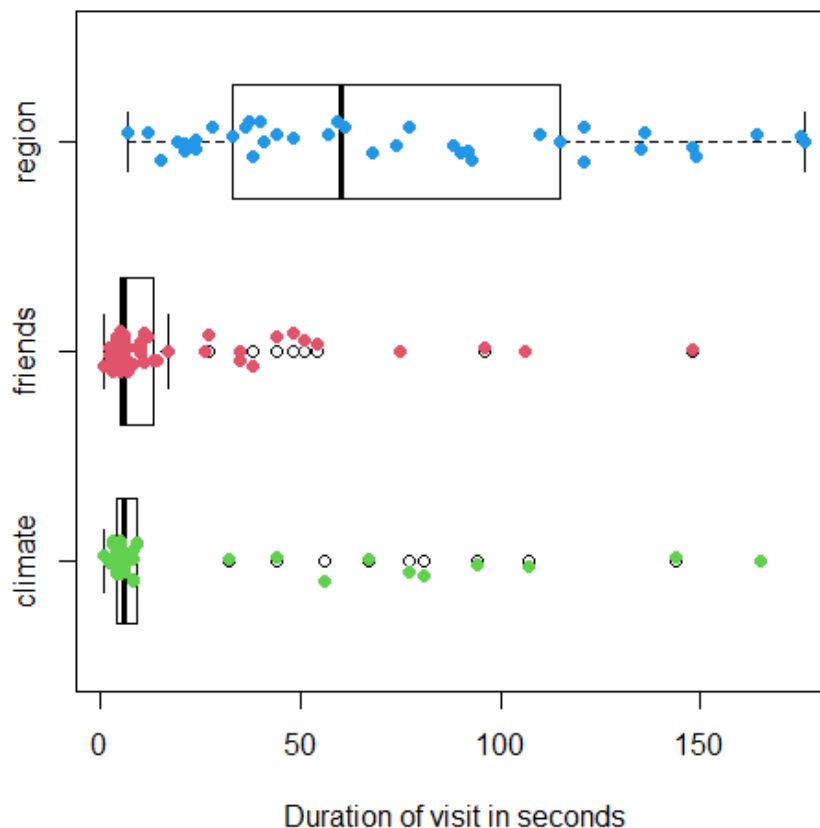
Region performed best!



Postcard Experiment: Results

On which landing pages to people stay the longest?

Visit duration of visitors by postcard



Participants in the *Region* condition spent significantly more time ($M = 73.5s$, $SD = 50.4$) on the website than participants in the *Friends* condition ($M = 17.5s$, $SD = 27.6$), $b = -56.10$, $p < 0.001$, or participants in the *Climate* condition ($M = 22.9s$, $SD = 38.9$), $b = -50.67$, $p < 0.001$.

Region performed best!