

Engaging in eco-friendly practices: a choice driven by environmental sensitivity or a marker of conformity to an ecological norm ?

The case of trail-runners and cyclists



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16th ESA Conference - 27-30 Aug 2024



Introduction

- The department of Hautes-Alpes, a popular tourist destination with many outdoor activities
- “Greening” these activities
- **Research issues :**
 - How environmentally sensitive are the practitioners of these activities?
 - How is it reflected in their environmental practices?
 - Are they a consequence of this environmental sensitivity?
- **Hypothesis :**
 1. Trail running and cycling practitioners have a marked environmental sensitivity that includes two dimensions. The environmental sensitivity at the political level is mainly linked to the social composition of practitioners.
 2. The adoption of eco-friendly practices by these individuals is due to their social characteristics that make them more inclined to conform to the norm of dominant ecology

I. Theoretical framework

- Ecological (environmental) sensitivity : “a greater or lesser interest in nature and the environment” (Bozonnet, 2012).
- Mesuring and theorizing environmental sensitivity : NEP scale (Dunlap et al., 2000), Stern (2000)
- A correlation between pro-environmental attitudes and behaviors among outdoor activities practitioners (Kil et al., 2014)
- Difficulties to obtain a predictive link attitudes and behaviors, quoted by Gruas in 2021 (Heimlich and Ardoin, 2008; Hidalgo-Baz, Martos-Partal and González-Benito, 2017; Casalo and Escario, 2017; McDonald et al., 2015; Zsóka et al., 2013)
- Contributions of French literature:
 - Environmental sensitivity is not enough to change behaviors (Pautard, 2017)
 - High cultural capital and high adherence to an ecological norm (Grossetête, 2019, Cafargna et al., 2014 ; Bourdieu, 1979, Ginsburger, 2020)
 - Eco-friendly practices, power relations and definition of what is legitimate (Ginelli, 2015)
 - Unequal distribution of eco-friendly practices among people (Coulangeon et al., 2023)

II. Methods (1/2)

Activity	Reference Population	Sample	Sample Gender Distribution	Collection Method
Trail Running	6,000 individuals	512 individuals (across 11 different competitions)	M : 79% F : 21%	Self-administered paper questionnaire on-site
Cycling	1,784 individuals	345 individuals (over 15 different days)	M : 71% F : 29%	Self-administered tablet questionnaire on site



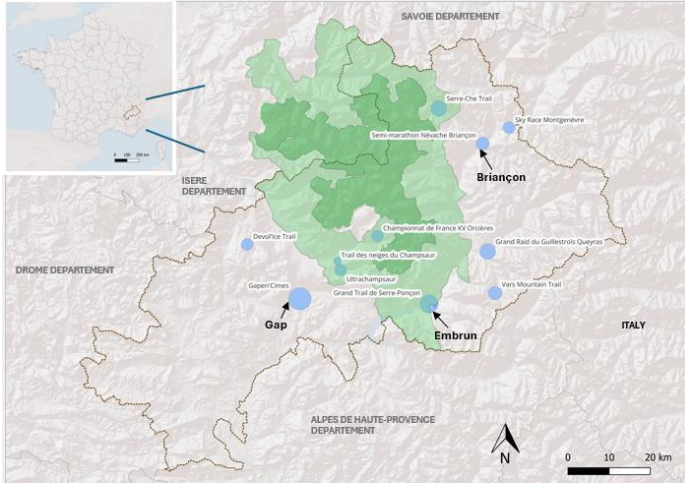
Trail Running: 25-40 years old, Master's degree minimum, executive or higher intellectual profession, residing in the Hautes-Alpes.

Cycling: On average 52 years old, Master's degree minimum, executive or higher intellectual profession, residing in the Hautes-Alpes or neighboring departments.

Some questions from our questionnaires were adapted from two national surveys:

ADEME, CREDOC (2023), *Sensibilité à l'environnement, action publique et fiscalité environnementale*.
CGDD/MTES, IPSOS (2016). *Enquête sur les pratiques environnementales des ménages*.

II. Methods (2/2)



Questionnaire survey of participants in trail running competitions in the Hautes-Alpes in 2023-2024

Number of responses to the survey



Landmarks

- Serre Che Trail
- Embrun
- Hautes-Alpes Departement
- Relief

Protected areas

- National Park Core Area
- National Park Membership Area

Sources : IGN
Realization : N. Baptiste, 2024



Sites d'enquête de la Durance à vélo, dans les Hautes-Alpes



Limites administratives

- Frontière avec l'Italie
- Départementales
- Communales

Réseaux

- Autoroute
- Route nationale
- Route départementale

Hydrographie

- Lac
- Durance à vélo
- Principaux cours d'eau
- Lieux d'enquête

Sources : IGN 2022 ; OSM, 2023 ; fond de carte Carto Light. Réalisatrice : Anais Degache

0 10 20 km



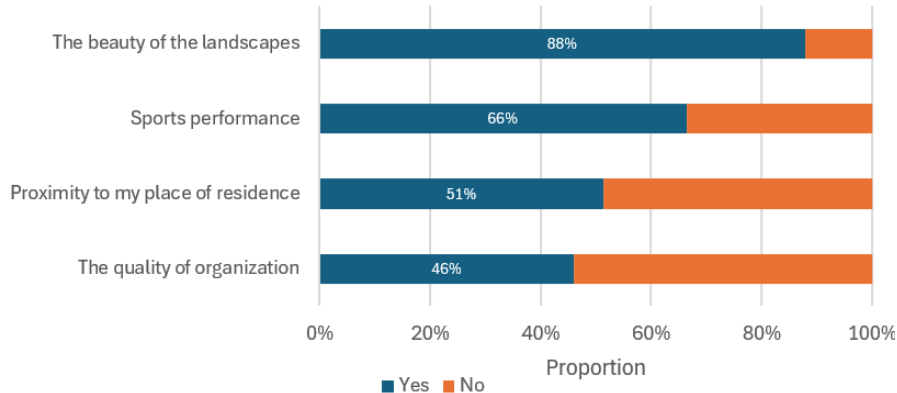
III. Environmental Sensitivity: A Consensus and/or a Political Issue ?

III.1. Environmental Sensitivity as a Consensus



I chose to participate in this running competition rather than another one for:

Reasons for participation



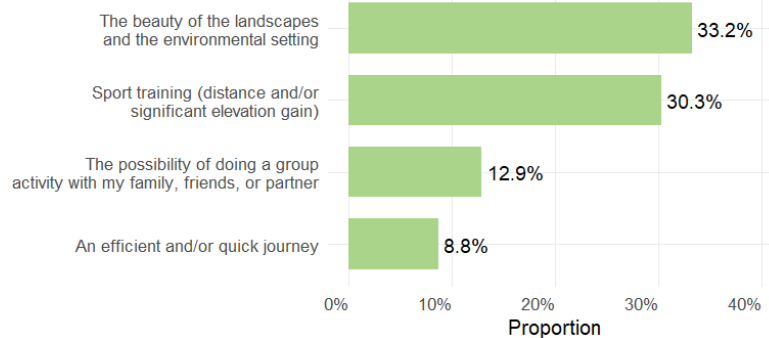
Number of respondents by item = 512

Methodological note: Respondents were asked to answer each of the questions either yes or no. Missing responses were counted as "no".



Regarding today's cycling route, what are or were your main expectations?

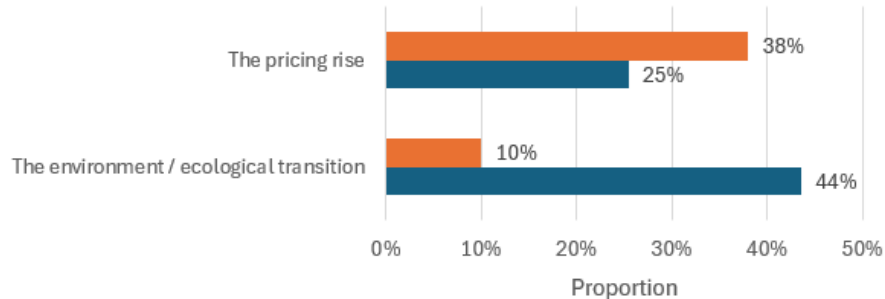
Number of respondents = 345; number of responses = 674



III.2. Environmental sensitivity : a political and normative issue



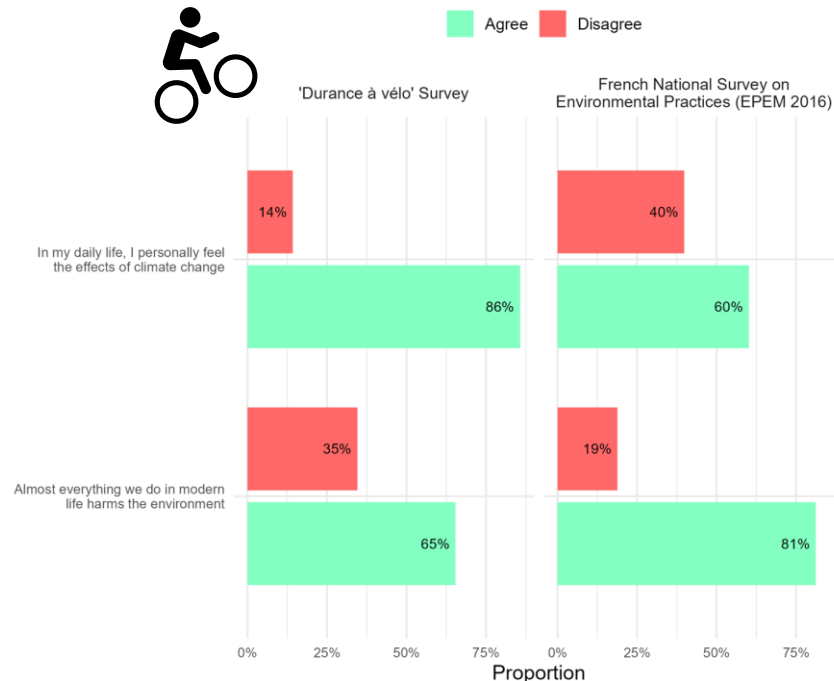
The question that seems to me to be the most important today in France is:



■ Frenc National Survey on Social Representations of Climate Change (ADEME, 2022)
 ■ Trail-running Survey

Comparison of Responses by Opinion Question and by Source

EPEM, 2016: n = 4250. Durance à vélo, 2023: n = 344. Non-responses were excluded.



The responses from the EPEM survey were divided into 4 opinion categories and were grouped into 2 for the sake of comparability.

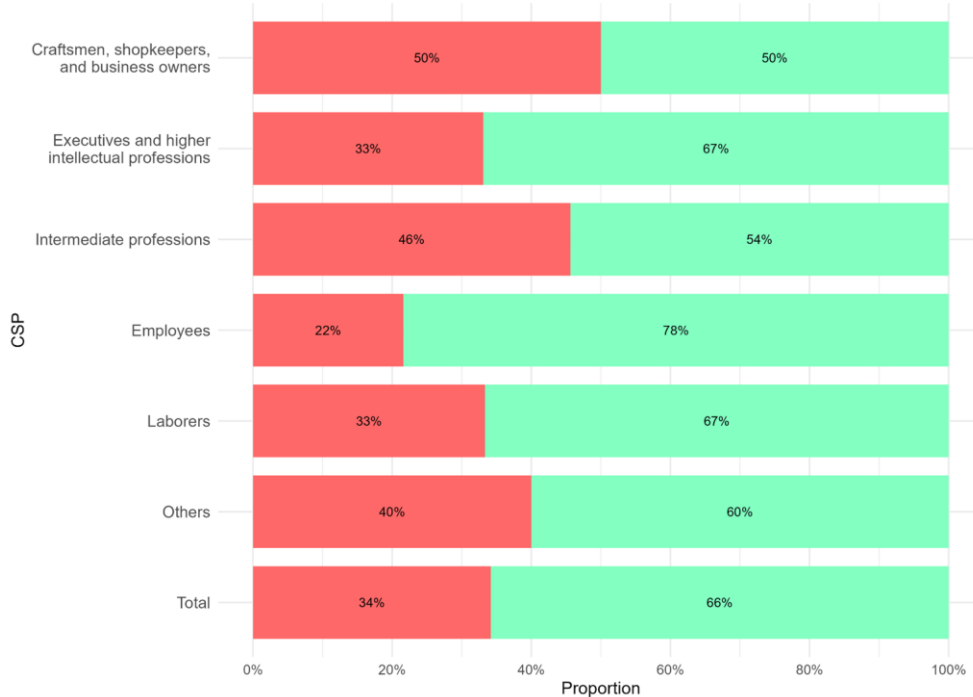
III.3. Environmental sensitivity primarily depends on socio-demographic variables



Proportion of responses for each socio-professional category regarding the opinion question 'Everything we do in modern life harms the environment'

N = 316

Agree Disagree

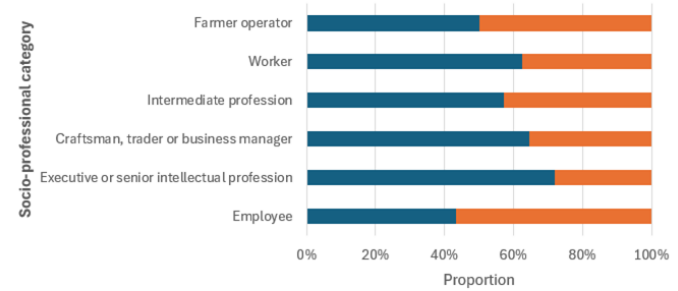


Pearson's Chi-squared test with simulated p-value (based on 2000 replicates)

X-squared = 11.546, df = NA, p-value = 0.03298



Proportion of responses by socio-professional category according to the question: "The question that seems to me to be the most important today in France is:"

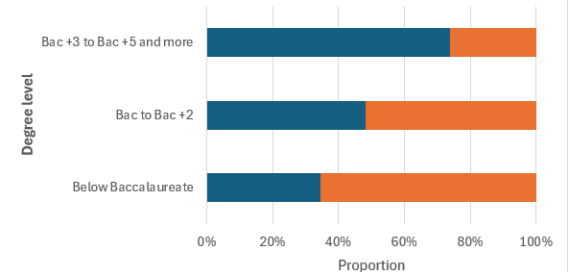


■ The environment / ecological transition ■ The pricing rise

Pearson's Chi squared test with simulated p-value :
p-value < .001 ; Chi-squared = 26.4 ; df = 2 ; n = 303



Proportion of responses by degree level according to the question: "The question that seems to me to be the most important today in France is:"



■ The environment / ecological transition ■ The pricing rise

Pearson's Chi squared test with simulated p-value
p-value = 0.003 ; Chi-squared = 17.8 ; df = 5 ; n = 272

IV. Eco-friendly practices: A Nuanced Assessment

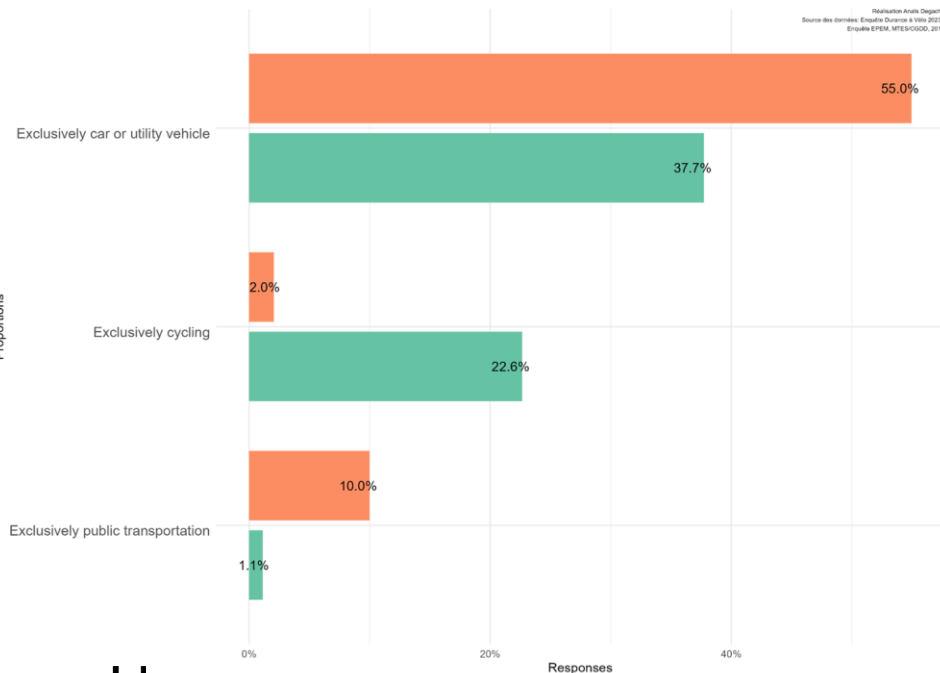
IV.1. Mobility practices: A pronounced use of bicycles in routine contexts



Among the following means of transportation, which one do you **USUALLY** use to commute to your workplace or place of study?

Comparison between a representative sample of the French national population (n=2321) and the survey population (n=265). Non-responses were excluded.

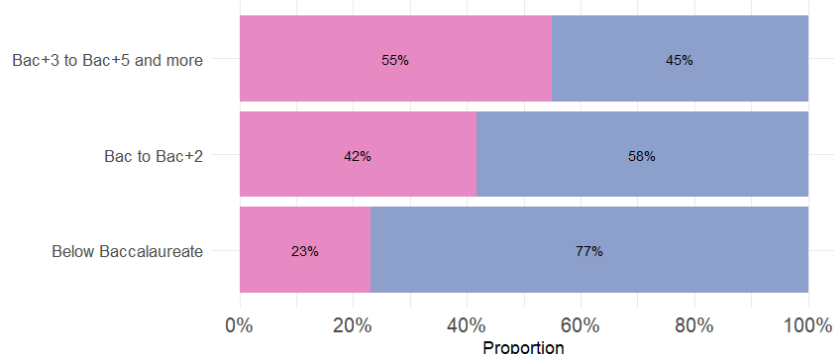
source ■ Durance à vélo ■ EPEM



Distribution of respondents who engage in utilitarian cycling by education level

N = 344

■ No ■ Yes



Pearson's Chi-squared test

X-squared = 19.988, df = 2, p-value = 4.568e-05

Is using a bicycle for utilitarian purposes correlated to environmental sensitivity ?

‘Everything we do in modern life harms the environment’ :

X-squared = 0.16339, df = 1, p-value = 0.6861

‘In my daily life, I personally feel the effects of climate change’ :

X-squared = 1.894, df = 1, p-value = 0.1688

‘I am afraid of the future because of climate and environmental crises’ :

X-squared = 0.37278, df = 1, p-value = 0.5415

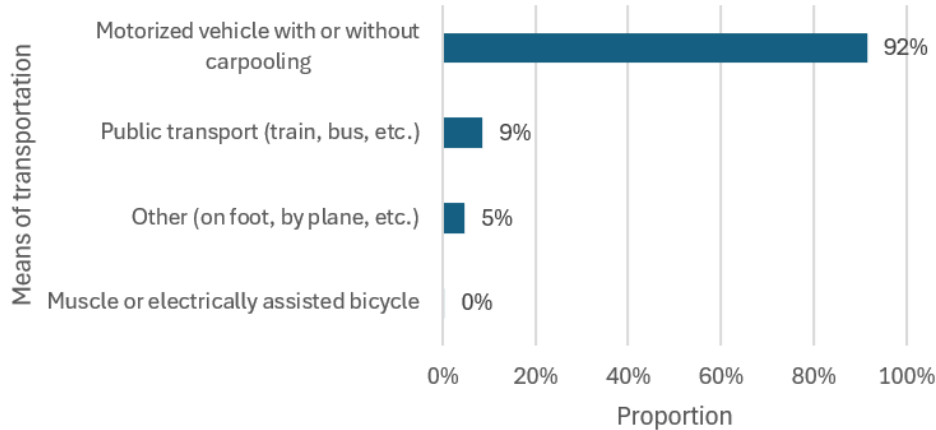
‘I do what is good for the environment, even if it costs more money’ :

X-squared = 0.40492, df = 1, p-value = 0.5246

IV.2. Mobility practices: A dominance of motorized vehicle for coming to the competition



To come to this competition from my home, I used the following means of transportation:



Number of responses = 542; number of respondents = 508

Methodological note: Respondents could tick several answers. The questionnaire included the response options "Individual motor vehicle without carpooling" and "Carpooling", which were here grouped under the option "Motor vehicle with or without carpooling".

Results of independence tests between the use of a motorized vehicle with or without carpooling and socio-demographic variables and environmental sensitivity

Degree level (Pearson's Chi squared test with simulated p-value)
p-value = 0.673 ; chi-squared = 0.793 ; df = 2 ; n = 494

Gender (Fisher's Exact test)
p-value = 0.081 ; n = 508

Age (Pearson's Chi squared test with simulated p-value)
p-value = 0.842 ; chi-squared = 1.41 ; df = 4 ; n = 507

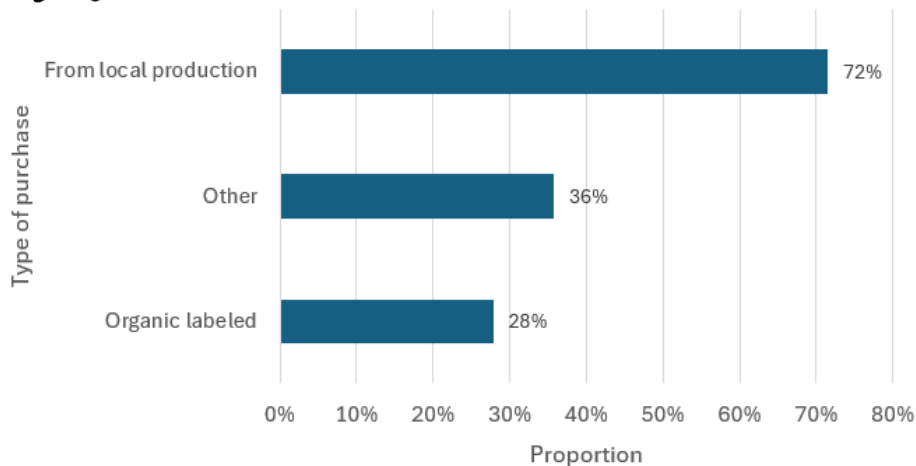
Socio-professional category (Pearson's Chi squared test with simulated p-value)
p-value = 0.757 ; chi-squared = 2.69 ; df = 5 ; n = 452

Environmental sensitivity
(Pearson's Chi squared test with simulated p-value)
p-value = 0.180 ; chi-squared = 1.80 ; df = 1 ; n = 300

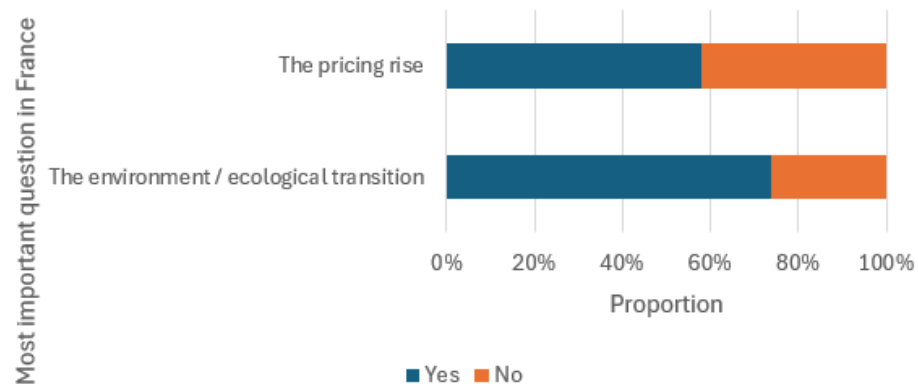
IV.3. Consuming local products: An eco-friendly practice but also a tourist activity



I have purchased or plan to purchase products:



Proportion of responses by most important question in France according to the purchase of products from local production



Fisher's Exact test - p -value = 0.156 ; n = 92

Conclusion

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- A consensual relationship with the landscape as an environmental amenity
- Dissent when it becomes political : a marker of ecological norm and unequal distribution across social categories (degree level as discriminating factor)
- No systematic link between environmental sensitivity and eco-friendly practices (the case of mobility)
- Eco-friendly practices in appearance and normative supports of tourist practices
- Qualitative data to better understand the reasons and processes of the conversion of practices