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My in 180 minutes: experimental protocol of a serious game aiming at the reduction of carbon footprint in Academia

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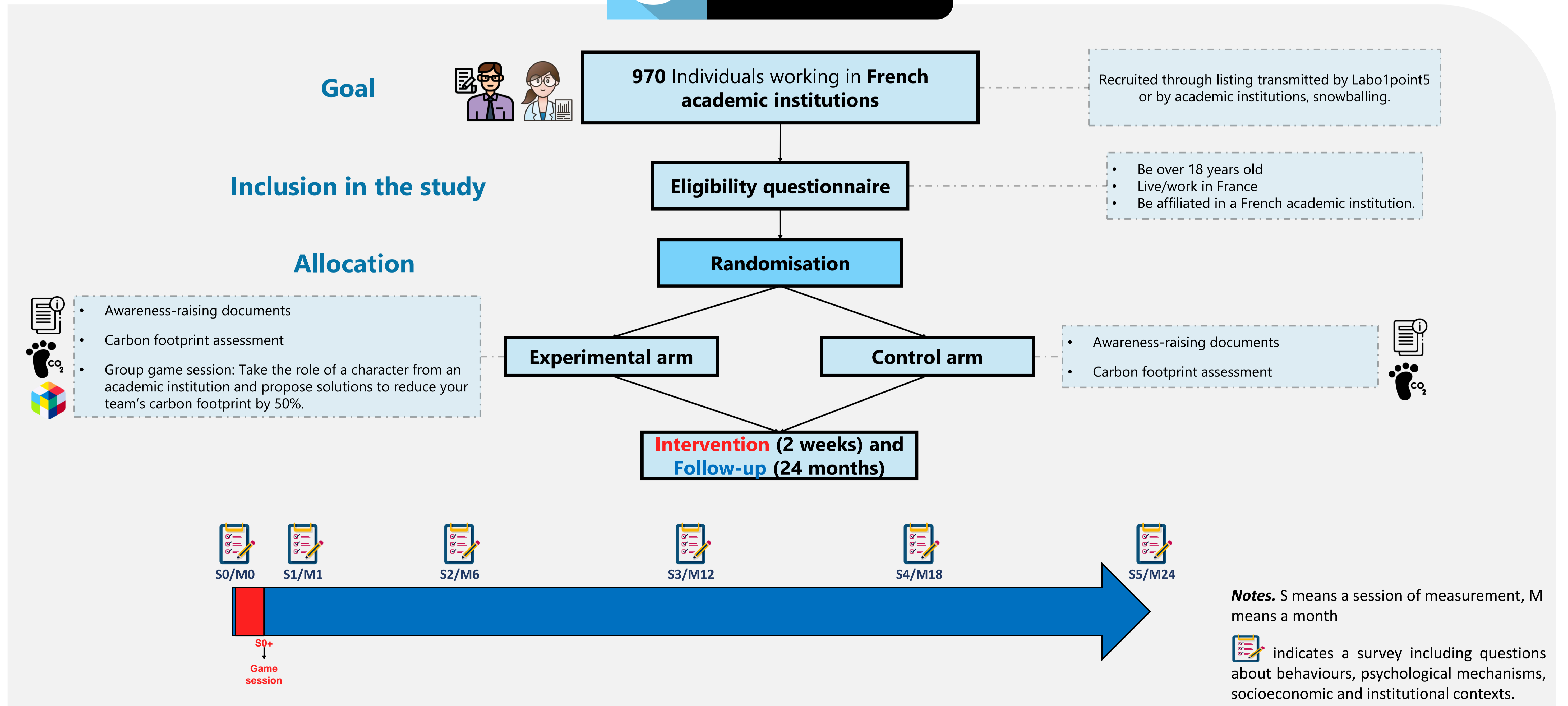
1 Background

- Conferences** 
 - Field missions** 
 - International collaborations** 
- Some **activities** in **academic culture** are often considered as a synonym of **academic success and recognition**¹
 - BUT** they can be an important **source of greenhouse gases**²
 - Serious games** have been already used to promote attenuation and adaptation behaviours but, **seldom experimentally evaluated**³

2 Aims

- Evaluate the effectiveness of the serious game “My  in 180” in **carbon footprint reduction within academic actors**
- Investigate the **levers and obstacles** (e.g., institutional, financial, familiar, psychological) related to **carbon footprint reduction**.

3 Methodology



4 Conclusions and Perspectives

- The present study will allow to assess **the effects of a serious game intervention vs. an awareness-raising intervention** on **carbon footprint reduction** among academic actors
- The present study will provide some insights about the **levers and obstacles** (e.g., **socioeconomic, institutional, psychological**) related to **carbon footprint reduction in academia**.
- A pilot study will start in January 2023** to test the feasibility of the recruitment and the implementation of the study.

References

¹ Berne, O., Agjer, L., Hardy, A., Lellouch, E., Aumont, O., Mariette, J., & Ben-Ari, T. (2022). The carbon footprint of scientific visibility. *Environmental Research Letters*. <https://doi.org/10.1088/1748-9326/ac9b51>

² van Ewijk, S., & Hoekman, P. (2021). Emission reduction potentials for academic conference travel. *Journal of Industrial Ecology*, 25(3), 778-788. <https://doi.org/10.1111/jiec.13079>

³ Fernández Galeote, D., Rajanen, M., Rajanen, D., Legaki, N.-Z., Langley, D. J., & Hamari, J. (2021). Gamification for climate change engagement: Review of corpus and future agenda. *Environmental Research Letters*, 16(6), 063004. <https://doi.org/10.1088/1748-9326/abec05>

