BMF CP60: Biodiversity loss perceptions and willingness to donate to public park planting projects

AISDL Team

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"– No utility compares to that of escaping an illicit dream, alive and better off, still intact!"

—In "The Philosophy of Awakening"; *The Kingfisher Story Collection* [1].

1. Project description

1.1. Main objectives

The current study is conducted to examine the following research questions:

- How are perceptions of biodiversity loss consequences associated with urban people's frequency of visiting public parks?
- How are perceptions of biodiversity loss consequences associated with urban peoples' willingness to donate to public parks?
- How is urban people's frequency of visiting public parks associated with their willingness to donate to public parks?

Findings from this study are expected to contribute to promoting the eco-surplus culture for achieving the environmental semiconducting principle [2,3].

1.2. Materials

The mindsponge theory will be used for conceptual development, and Bayesian

Mindsponge Framework (BMF) analytics will be used for statistical analysis on a dataset of 535 urban residents across Vietnam [4-7]. The bayesvl R package, aided by the Markov chain Monte Carlo (MCMC) algorithm, will be employed for statistical analyses [8]. For more information on BMF analytics, portal users can refer to the following book [9]. Data and code snippets of this initial analysis were deposited at https://zenodo.org/records/10589251.

1.3. Main findings

The preliminary analysis shows that urban residents perceiving health loss and knowledge loss as consequences of biodiversity loss are more willing to contribute financially to the planting project in the nearby public park (see Figure 1). Residents visiting the nearby public park more frequently are also more willing to contribute financially. The positive associations of perceived knowledge loss and public park visiting frequency with the willingness to donate are highly reliable, while that between perceived health loss and willingness to pay is moderately reliable.
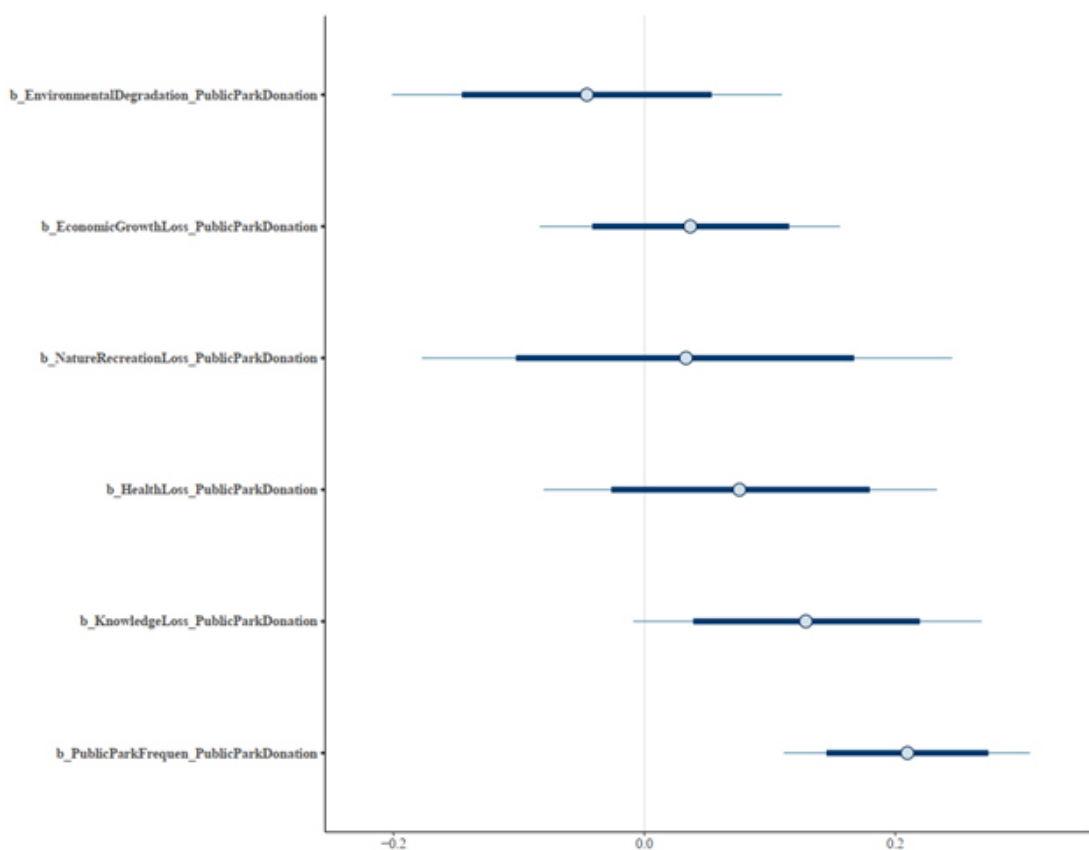

Figure 1. Estimated coefficients

2. Collaboration procedure

Portal users should follow these steps for registering to participate in this research project:

1. Create an account on the website (preferably using an institution email).
2. Comment on your name, affiliation, and desired role in the project below this post.
3. Patiently wait for the formal agreement on the project from the AISDL mentor.

If you have further inquiries, please contact us at aisdl_team@mindsponge.info

If you have been invited to join the project by an AISDL member, you are still encouraged to follow the above formal steps.

All the resources for conducting and writing the research manuscript will be distributed upon project participation.

AISDL mentor for this project: **Minh-Hoang Nguyen**.

An AISDL member who has joined this project is Quan-Hoang Vuong.

The research project strictly adheres to scientific integrity standards, including authorship rights and obligations [10], without incurring an economic burden at participants' expenses [11].

References

[1] Vuong QH. (2022). *The Kingfisher Story Collection*. https://www.amazon.com/dp/B0BG2NNHY6

[2] Vuong QH. (2021). The semiconducting principle of monetary and environmental values exchange. *Economics and Business Letters*, 10(3), 284-290. https://reunido.uniovi.es/index.php/EBL/article/view/15872

[3] Nguyen MH, Jones TE. (2022). Building eco-surplus culture among urban residents as a novel strategy to improve finance for conservation in protected areas. *Humanities and Social Sciences Communications*, 9, 426. https://www.nature.com/articles/s41599-022-01441-9

[4] Nguyen MH, et al. (2022). Introduction to Bayesian Mindsponge Framework analytics: An innovative method for social and psychological research. *MethodsX*, 9, 101808. https://linkinghub.elsevier.com/retrieve/pii/S2215016122001881

[5] Vuong QH. (2023). *Mindsponge Theory*. De Gruyter.

[6] Vuong QH, et al. (2021). Identifying the moral–practical gaps in corporate social responsibility missions of Vietnamese firms: An event?based analysis of sustainability feasibility. *Corporate Social Responsibility and Environmental Management*, 28(1), 30-41. https://onlinelibrary.wiley.com/doi/abs/10.1002/csr.2029

[7] Nguyen MH. (2021). Multifaceted interactions between urban humans and biodiversity-related concepts: A developing-country data set. *Data Intelligence*, 3(4), 578-605.

[8] La VP, Vuong QH. (2019). bayesvl: Visually Learning the Graphical Structure of Bayesian Networks and Performing MCMC with 'Stan'. *The Comprehensive R Archive Network*. https://cran.r-project.org/web/packages/bayesvl/index.html

[9] Vuong QH, Nguyen MH, La VP. (2022). *The mindsponge and BMF analytics for innovative thinking in social sciences and humanities*. De Gruyter. https://www.amazon.com/dp/8367405102/

[10] Vuong QH. (2020). The limitations of retraction notices and the heroic acts of authors who correct the scholarly record: An analysis of retractions of papers published from 1975 to 2019. *Learned Publishing*, 33(2), 119-130. https://onlinelibrary.wiley.com/doi/abs/10.1002/leap.1282

[11] Vuong QH. (2018). The (ir)rational consideration of the cost of science in transition economies. *Nature Human Behaviour*, 2, 5. https://www.nature.com/articles/s41562-017-0281-4