BMF CP67: Anthropocentrism, virtual world behaviors, and game-playing immersiveness

AISDL Team

Jan. 30, 2024

"Are humans in a toxic, abusive relationship with nature? Love is strange."

—In "Glands of Love"; *Meandering Sobriety* [1].

1. Project description

1.1. Main objectives

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

- How are Animal Crossing: New Horizons (ACNH) game players' exploitation behaviors in the virtual world associated with their Anthropocentrism mindset?
- Do game players' in-game immersiveness (i.e., rich experience, disconnection from the outside world) moderate the association between the frequency of exploitation behaviors and their Anthropocentrism?

Findings from this study are expected to contribute to understanding the association between game players' perceptual factors and game-playing experiences [2].

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 640 ACNH game players from 29 countries around the globe [3-6]. The bayesvl R package, aided by the Markov chain Monte Carlo (MCMC) algorithm, will be employed for statistical analyses [7]. For more information on BMF analytics, portal users can refer to the following

book [8]. Data and code snippets of this initial analysis were deposited at .

1.3. Main findings

The preliminary analysis shows that fishing frequency is negatively associated with Anthropocentrism, whereas bug-catching frequency is positively associated with Anthropocentrism (see Figure 1). The level of disconnection from the outside world negatively moderates the association between fishing frequency and Anthropocentrism and positively moderates the association between bug-catching frequency and Anthropocentrism. The explanation for such associations may lie in the punishment mechanism of ACNH.
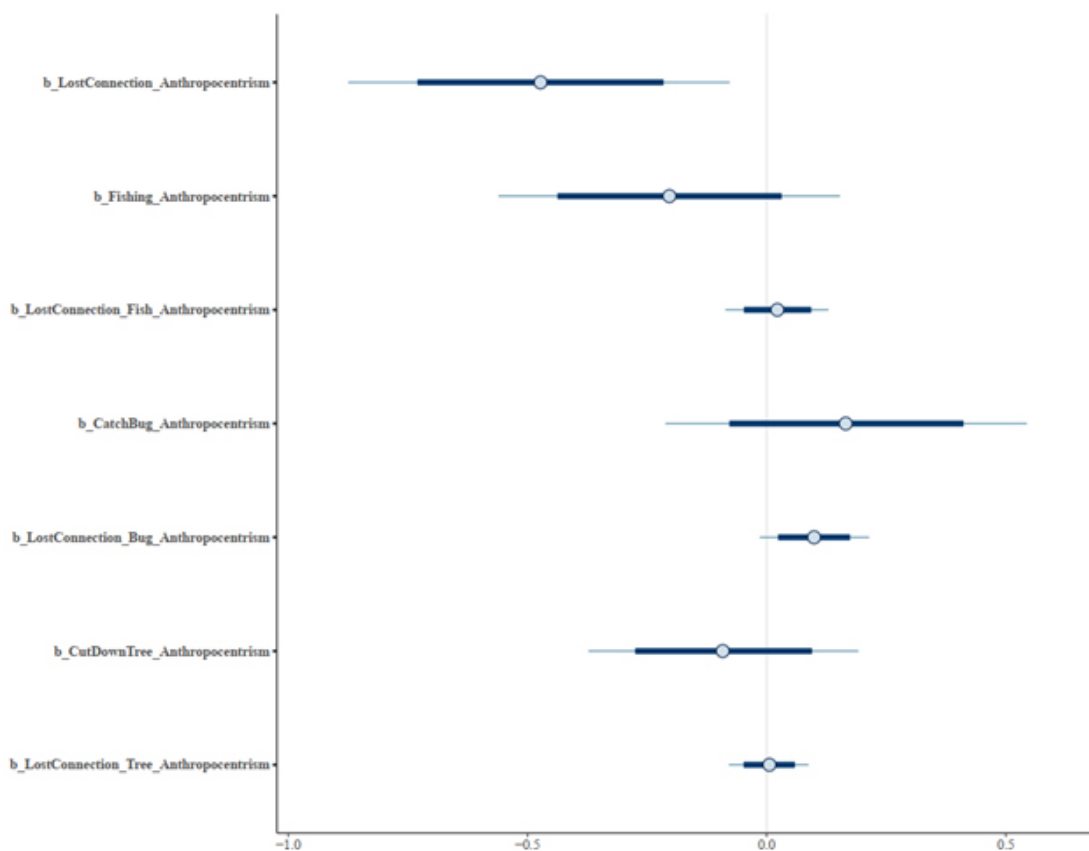

Figure 1: Estimated coefficients

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**

AISDL members who have joined this project are Quan-Hoang Vuong and Viet-Phuong La.

The research project strictly adheres to scientific integrity standards, including authorship rights and obligations [9], without incurring an economic burden at participants' expenses [10].

References

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

[2] Vuong QH, *et al*. (2021). On the environment-destructive probabilistic trends: A perceptual and behavioral study on video game players. *Technology in Society*, 65, 101530. https://www.sciencedirect.com/science/article/abs/pii/S0160791X21000051

[3] 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

[4] Vuong QH. (2023). *Mindsponge Theory*. De Gruyter. https://www.amazon.com/dp/8367405145/

[5] Vuong QH, Napier NK. (2015). Acculturation and global mindsponge: An emerging market perspective. *International Journal of Intercultural Relations*, 49, 354-367. https://www.sciencedirect.com/science/article/abs/pii/S0147176715000826

[6] Vuong QH, et al. (2021). [A multinational data set of game players' behaviors in a virtual world and environmental perceptions](). *Data Intelligence*, 3(4), 606–630.

[7] 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

[8] 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/

[9] 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

[10] 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