# BMF CP64: Predictors of premium for bio-based clothes and discount for second-hand clothes

*AISDL Team*

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"Crow recalls the story about his ancestor, Crow Forefather and Peacock, drawing feathers together. Crow Forefather had drawn a beautiful outfit for Peacock, but when it was the turn for Peacock to draw, Crow Forefather was in such a hurry to eat that he told Peacock to just pour the black ink bucket onto him. Since then, the Crows have lived with pit black, ugly-looking feathers."

—In "Contentment"; *The Kingfisher Story Collection* [1].

## 1. Project description

### *1.1. Main objectives*

Although Colasante and D'Adamo [2] conducted the analysis to investigate the predictors of the amount of money that Italian consumers are willing to pay for bio-based clothes and second-hand clothes, they did not examine the factors predicting the premium amount that consumers are willing to pay for bio-based clothes and the discount they want for second-hand clothes. Thus, the current study is conducted to examine the following research questions:

- How are motivations to buy bio-based clothes and socio-demographic factors associated with the premium Italian consumers willing to pay for bio-based clothes?
- How are motivations to buy bio-based clothes and socio-demographic factors associated with the discount Italian consumers want for second-hand clothes?

Findings from this study are expected to contribute to understanding consumers'

purchasing decisions regarding circular bioeconomy, shedding light on the possible methods to promote sustainability among textile and apparel businesses [3-5].

## 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 402 Italian people taking part by using the Amazon Mechanical Turk (MTurk) platform [6-8]. The bayesvl R package, aided by the Markov chain Monte Carlo (MCMC) algorithm, will be employed for statistical analyses [9]. For more information on BMF analytics, portal users can refer to the following book [10]. Data and code snippets of this initial analysis were deposited at https://zenodo.org/records/10589197.

## 1.3. Main findings

The preliminary analysis shows that consumers buying second-hand clothes for exclusives (high reliability), quality (moderate reliability), and pollution reduction when buying new clothes (weak reliability) are more likely to want deeper discounts (see Figure 1). Whereas older people want to pay less for second-hand clothes (moderate reliability), males are willing to pay more for second-hand clothes (moderate reliability).
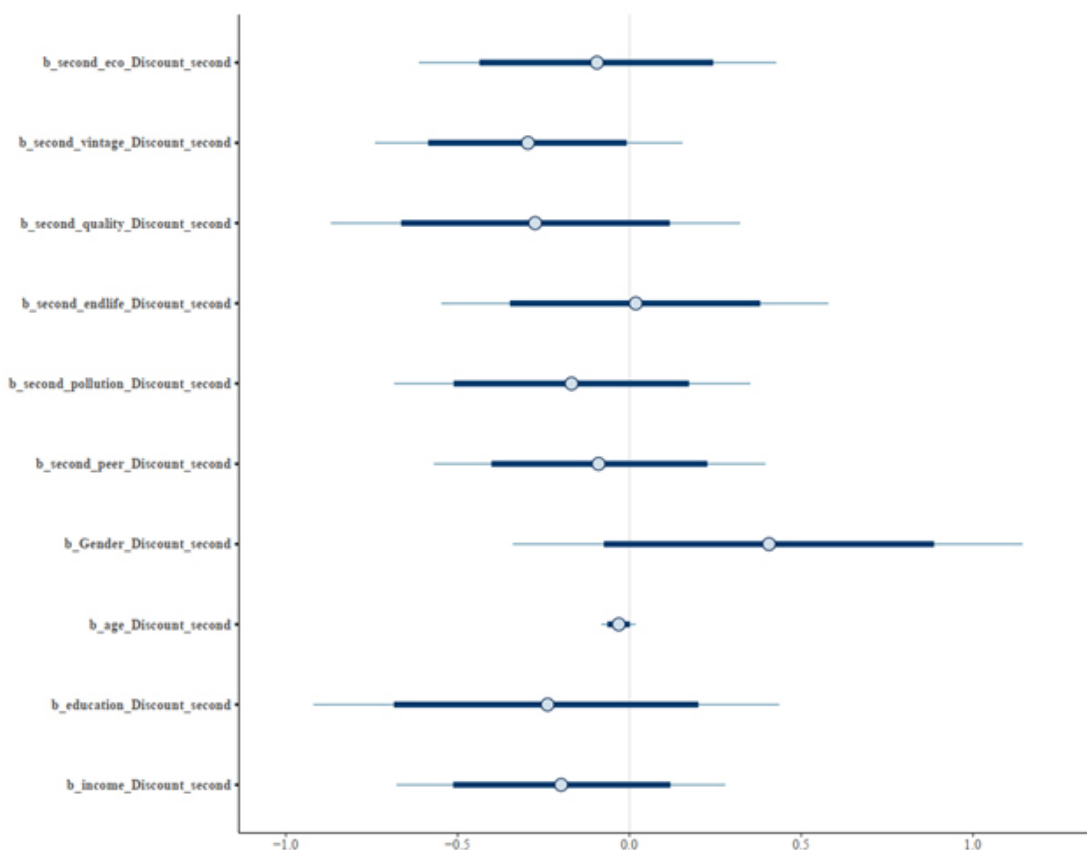


**Figure 1:** Estimated coefficients

## 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 [11], without incurring an economic burden at participants' expenses [12].

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