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# Effect of destination grammatical gender on its perceived masculinity and femininity

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## Theoretical framework

# Why study brand masculinity and femininity?

**Brand Gender definition**

The human personality traits related to masculinity brand personality (MBP) and femininity brand personality (FBP) *(Grohmann, 2009).*

**Destination Gender definition**

The set of human personality traits associated with masculinity and femininity applicable and relevant to destinations that are perceived by potential tourists" *(Pan et al., 2021)*

## Brand Gender categorization

Brand Gender predicts and enhances brand equity *(Lieven, 2014).*

CHANEL


Mercedes-Benz

## Brand Gender Benefits

| | |
|---|---|
| Brand gender increases | -brand equity *(Machado et al., 2019).*<br>-brand love *(Famaki et al., 2021).*<br>-brand loyalty *(Vacas de Carvalho et al., 2020).* |
| Feminine brands | -perform better (Interbrand ranking).<br>- improve perceived warmth.<br>- improve customer attitude.<br>*(Pogacar et al., 2021)* |

## Theoretical framework

# From Brand Gender to Destination Gender

**Definition** *(Blain et al., 2005 based on Aaker, 1997)*

Destination branding encompasses all **marketing activities** that (1) support the creation of a name, symbol, logo, word mark, or other graphic that clearly identifies and **differentiates a destination**; (2) consistently conveys the expectation of a **memorable travel experience uniquely associated with the destination**; (3) serves to consolidate and reinforce the **emotional connection** between the visitor and the destination; and (4) reduces consumer search costs and perceived risk."

**Example :**


**Benefits**

Destination Personality positively impact destination image, recommend intention, satisfaction, trust *(Chen & Phou, 2013; De Moya & Jain, 2013; Hosany, 2006)*

Destination Gender influence Destination brand attachment and Destination brand love *(Hamdy et al. 2023*) tourist loyalty and experience memorability *(Ren & Pan, 2024)*

## Theoretical framework

# But what can shape the gender of a brand?


*Is this car masculine or feminine?*

Masculine personality traits *(Lieven et al., 2014).*

**vs**

In French we say "**une** voiture" → a feminine word.

**Semantic & Formal Gender**

Semantic Gender: Linked to stereotypes

A beer has a masculine semantic gender *(Worth, Smith & Mackie 1992).*

Formal Gender: Linked to grammatical rules

In French, a beer has a feminine formal gender “une bière”.

A brand can have a formal gender

According to grammatical rules in the gendered language: Disatel / Disatelle.

**Changing formal gender**

In gendered languages, all nouns possess masculine or feminine forms.

→ Through the definite article.

→ Through the end of the word.

**Effects of grammatical gender (definite article)**

| Masculine | Feminine |
|---|---|
| Le COVID-19 | La COVID-19 |

By generating gender stereotypical perceptions, the feminine form is perceived as less dangerous resulting in less precaution *(Mecit et al., 2021).*

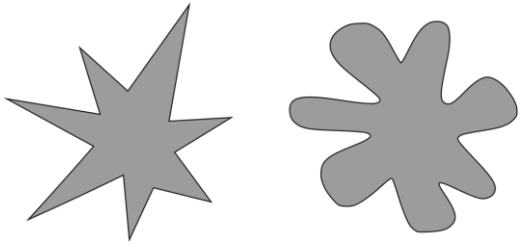
Qualitative interviews revealed that grammatical gender is one of the component influencing brand gender attribution *(Ulrich et al., 2011).*

## Theoretical framework

# How can linguistics and grammar induce a perception of gender?

**Kiki Bouba effect**

One of the first pieces of evidence that semantics can shape mental perception *(Köhler, 1929).*



It also induces personality traits
→ Kiki = happiness and cleverness *(Milan et al., 2013).*

**Language shapes thoughts**

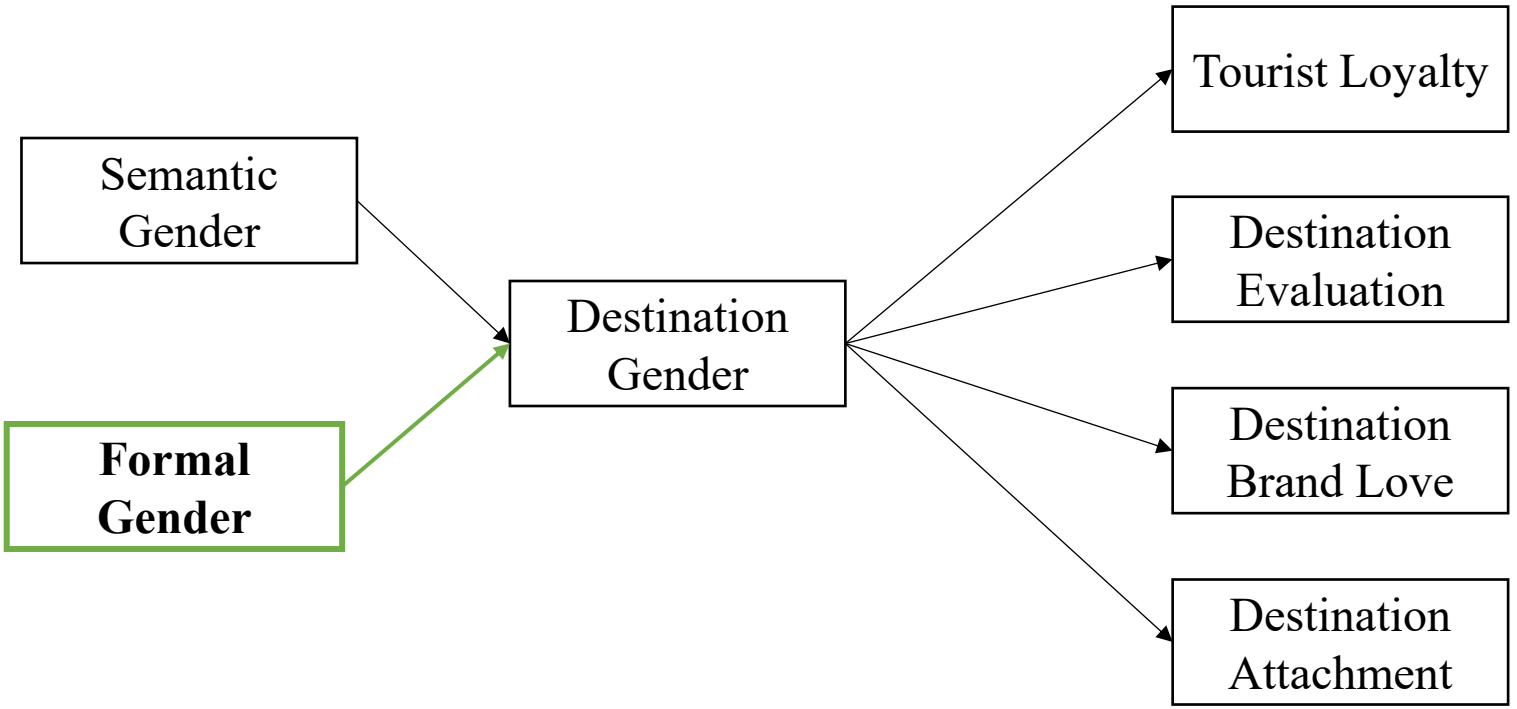
For the same object, according to the language you speak, the meaning of the word will vary.

Language shapes relation with time and space.

*(Boroditsky, 2006)*

# Theoretical framework

## Where is the gap ?


Semantic Gender
Formal Gender
Destination Gender
Tourist Loyalty
Destination Evaluation
Destination Brand Love
Destination Attachment

## Study I

# Experimental design with fake destination names

## Methodology

Generation of 4 pairs of fake destination names (masculine vs feminine).

| Masculine | Feminine |
|---|---|
| Le Navostan | La Navostanie |
| Le Sarani | La Saranie |
| Le Zandor | La Zandorie |
| Le Bossand | La Bossande |

## Methodology

Generation of 6 blocks with 2 masculine versions and 2 feminine versions each

| | | | | |
|---|---|---|---|---|
| Block 1* | La Navostanie (F) | La Bossande (F) | Le Zandor (M) | Le Sarani (M) |
| Block 2* | La Navostanie (F) | Le Bossand (M) | Le Zandor (M) | La Saranie (F) |
| Block 3* | La Navostanie (F) | Le Bossand (M) | La Zandorie (F) | Le Sarani (M) |
| Block 4* | Le Navostan (M) | Le Bossand (M) | La Zandorie (F) | La Saranie (F) |
| Block 5* | Le Navostan (M) | La Bossande (F) | La Zandorie (F) | Le Sarani (M) |
| Block 6* | Le Navostan (M) | La Bossande (F) | Le Zandor (M) | La Saranie (F) |

(F) = Grammatical feminine destination name; (M) = Grammatical masculine destination name
*The sixth block illustrates all the possible combinations by respecting the distribution of two masculine and two feminine destination names in each block.

## Methodology

106 French speaking participants (Mage = 41.44 ; SDage = 15.13 ; 75.5% female)

Each participant evaluated 1 of the 6 blocks on a masculinity and femininity brand perception through a 11 items Likert Scale

| Masculinity | Femininity |
|---|---|
| Adventurous | Fragile |
| Aggressive | Graceful |
| Brave | Sensitive |
| Daring | Sweet |
| Dominant | Tender |
| Sturdy | |

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Prenez un instant pour penser à la personnalité que la plupart des gens attribueraient à un pays appelé

**La Navostanie**

Veuillez ensuite évaluer cette personnalité en donnant votre réponse pour chacun des traits suivants.
**La Navostanie** sera généralement évaluée comme:

| | Pas du tout d'accord | En désaccord | Plutôt en désaccord | Ni d'accord, ni en désaccord | Plutôt d'accord | D'accord | Tout à fait d'accord |
|---|---|---|---|---|---|---|---|
| Aventureuse | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Aggressive | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Courageuse | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Audacieuse | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Dominante | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Vigoureuse | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Fragile | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Elegante | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Sensible | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Douce | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Tendre | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**The order of item presentation was randomized**

**Hypothesis**

H1: Our grammatical manipulation will affect the perceived masculinity and femininity of the destination.

H1a: Grammatically masculine destinations are perceived as having more masculine personality traits than grammatically feminine destinations.

H1b: Grammatically feminine destinations are perceived as having more feminine personality traits than grammatically masculine destinations.

## Study I

# Findings

**Analyses and Results**

We first need to validate the 2 dimensions of the measurement

| Masculinity | Femininity |
|---|---|
| Adventurous | Fragile |
| Aggressive | Graceful |
| Brave | Sensitive |
| Daring | Sweet |
| Dominant | Tender |
| Sturdy | |

To do that, we use Confirmatory Factor Analysis

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**Analyses and Results**

Use of *sem* command

$$sem\,(Masc \rightarrow ADVENTUROUS,)(Masc \rightarrow AGGRESSIVE,)(Masc \rightarrow BRAVE,)(Masc \rightarrow DARING,)(Masc \rightarrow DOMINANT,)(Masc \rightarrow VIGOROUS,)(Fem \rightarrow FRAGIL,)(Fem \rightarrow ELEGANT,)(Fem \rightarrow SENSITIVE,)(Fem \rightarrow SWEET,)(Fem \rightarrow TENDER,), covstruct(_{lexogenous}, diagonal\ vce(cluster\ ID) standardized\ latent(Masc\ Fem)\ cov(Masc * Fem)\ nocapslatent$$

Since we have a repeated measure, observations are not independent
→ We cluster the error term for more robust results

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## CFA Results

| | Loading | Standard error | Z | P>\|z\| | Confident Interval |
|---|---|---|---|---|---|
| Adventurous | .5781 | .0523 | 11.05 | .000 | [.4755 - .6807] |
| Aggressive | .5150 | .0862 | 5.98 | .000 | [.3461 - .6838] |
| Brave | .5858 | .0675 | 8.68 | .000 | [.4535 - .7181] |
| Daring | .5912 | .0592 | 9.98 | .000 | [.4751 - .7074] |
| Dominant | .6982 | .0572 | 12.22 | .000 | [.5862 - .8102] |
| Sturdy | .7475 | .0427 | 17.49 | .000 | [.6637 - .8312] |
| Fragile | .5095 | .0418 | 12.20 | .000 | [.4276 - .5913] |
| Graceful | .5434 | .0452 | 12.03 | .000 | [.4549 - .6319] |
| Sensitive | .8223 | .0232 | 35.49 | .000 | [.7769 - .8677] |
| Sweet | .8592 | .0161 | 53.14 | .000 | [.8275 - .8909] |
| Tender | .8425 | .0186 | 45.66 | .000 | [.8063 - 8787] |
| Cov (Masc, Fem) | -.4745 | .1063 | -4.46 | .000 | [-.6828 - -.2660] |

All the items have a factor loading of at least .50 within their respective dimension

$\alpha_{masc} = .78$ $\alpha_{fem} = .83$

**CFA Results**

All the items have a factor loading of at least .50 within their respective dimension

$$\alpha_{masc} = .78 \qquad \alpha_{fem} = .83$$

We reduce dimension by taking the mean of the items for each dimension

Therefore, we are left with two continuous variables: score of masculinity
score femininity

**Analyses and Results**

| Masculinity | Femininity |
|---|---|
| Adventurous | Fragile |
| Aggressive | Graceful |
| Brave | Sensitive |
| Daring | Sweet |
| Dominant | Tender |
| Sturdy | |

$anova\ Y, repeated\ (\quad)$
$mixed$

## RMANOVA Results

| | df | F | Sig | Partial Eta Squared |
|---|---|---|---|---|
| Gramm_Gender | 1 | 0.178 | 0.674 | 0.002 |
| Perceived_Gender | 1 | 69.161 | <0.001*** | 0.399 |
| Gramm_Gender*Perceived_Gender | 1 | 6.638 | 0.011* | 0.060 |

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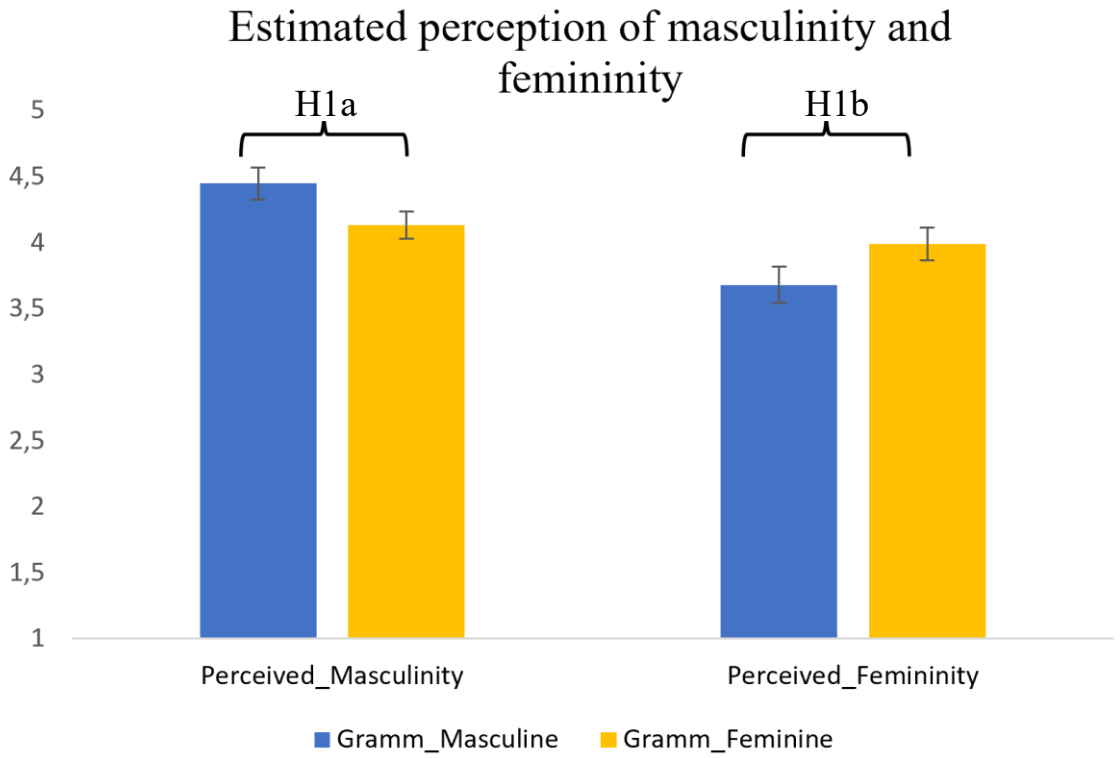


**H1a supported**

**(Mean_diff = .36 ; sd = .98 ; t= 4.049 ; pvalue < .001)**

**H1b supported**

**(Mean_diff = -.42 ; sd = 1.28 ; t= -3.636 ; pvalue < .001)**

## Study II : Method and Results

# Working with real destinations

**Hypothesis**

H1 : The masculine and feminine personality traits of a country will be primarily determined by its grammatical gender in French, whereas in English, these personality traits result solely from economical, geographical, demographic, political, relational, and social characteristics.

Pre-Registered on OSF platform: https://osf.io/8e6xg

$$Masc\_Traits = Gr\ldots_{der} + GDP + Area + Climate_{Zone} + \cdots + e$$

$$Fem\_Traits = Gr\ldots_{der} + GDP + Area + Climate_{Zone} + \cdots + e$$

## Methodology

Took 193 UN countries members.

## Methodology

Each participant received one unique set of 5 countries.

## Methodology

Repeat until all countries have been assigned

## Methodology

Repeat with new set of 5 countries.

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Take a moment to think about the masculine and feminine characteristics of the following country:

**Belgium**

Then, please evaluate these two criteria by providing your response for each trait below.
**Belgium** seems to you:

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Masculine | ○ | ○ | ○ | ○ | ○ |
| Feminine | ○ | ○ | ○ | ○ | ○ |

**The item order was randomized**

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Prenez un instant pour penser aux caractères masculins et féminins du pays suivant:

**La Belgique**

Veuillez ensuite évaluer ces deux critères en donnant votre réponse pour chacun des traits ci-dessous.
**La Belgique** vous semble:

| | Pas du tout d'accord | Plutôt en désaccord | Ni d'accord, ni en désaccord | Plutôt d'accord | Tout à fait d'accord |
|---|---|---|---|---|---|
| Masculine | ○ | ○ | ○ | ○ | ○ |
| Féminine | ○ | ○ | ○ | ○ | ○ |

**Sample**

Two samples: French speakers (n = 231) and English speakers (n = 230)

French : ($M_{age}$ = 33.91; $SD_{age}$ = .68; 41.88% female)
English: ($M_{age}$ = 40.04; $SD_{age}$ = .81; 54.98% female)

Dataset with 1150 observations for each sample

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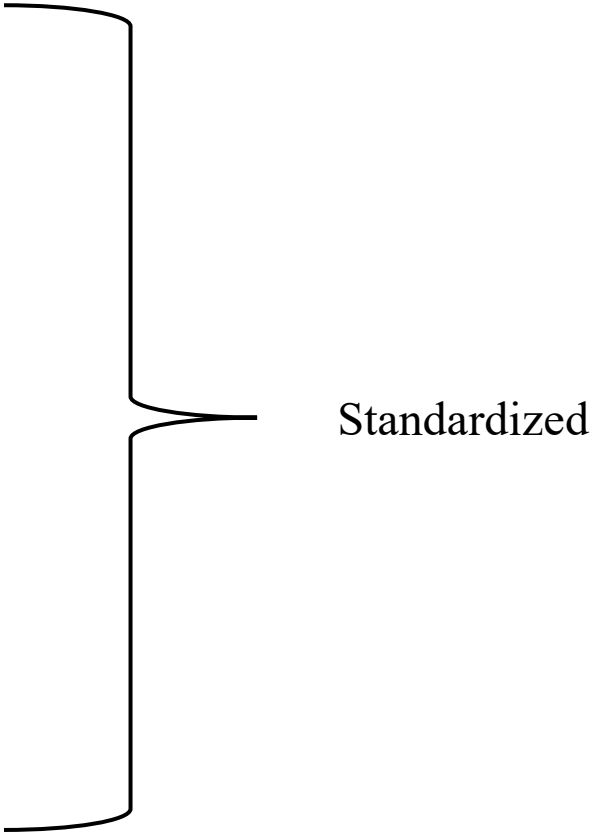
| Idx | Gender | Age | Nationality | Language | Country | masc | fem |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 26 | 78 | Fr | South Africa | 4 | 2 |
| 1 | 2 | 26 | 78 | Fr | Malaysia | 3 | 3 |
| 1 | 2 | 26 | 78 | Fr | Togo | 3 | 4 |
| 1 | 2 | 26 | 78 | Fr | Turkey | 4 | 2 |
| 1 | 2 | 26 | 78 | Fr | Cameroon | 5 | 1 |
| 2 | 2 | 28 | 18 | En | Guinea | 3 | 3 |
| 2 | 2 | 28 | 18 | En | Uzbekistan | 3 | 3 |
| 2 | 2 | 28 | 18 | En | Bahamas | 3 | 3 |
| 2 | 2 | 28 | 18 | En | Colombia | 2 | 4 |

**Control variables**

- GDP per capita
- Climate zone
- Criminality Index
- Armed Force
- Gini Index
- HDI Index
- Population Rate
- Population Density
- Surface Area
- Democratic Index
- Sex Ratio
- Average Elevation
- Education Ratio W vs M
- CO2 Emission per capita
- …



**Remember that participants evaluated 5 countries in a row**

**→ Repeated measures = Non-independent measures**

**Hausman Test**

```
xtset idx
xtreg masc GramGender Language controle variable, fe
xtreg masc GramGender Language controle variable, re
estimate store re
hausman fe re
```

**Results**

( $\chi^2_{masc} = 24.61 : prob > \chi^2_{masc} = .4845$ ; $\chi^2_{fem} = 23.28 : prob > \chi^2_{fem} = .5616$ )

→ Random effects seem more appropriate

**Output of regression with interaction through** *xtset idx* **and** *xtreg, re*

| | Coefficient | Std. err. | z | P>\|z\| | [95% conf. interval] |
|---|---|---|---|---|---|
| GrammGender | -.1427 | .0943 | -1.51 | .130 | [-.3275 ; .0420] |
| Language | .3482 | .0804 | 4.33 | .000*** | [.1906 ; .5058] |
| GrammGenderxLanguage | -.5022 | .1175 | -4.28 | .000*** | [-.7324 ; -.2720] |
| Control Variables | … | … | … | … | … |

**Output of regression with interaction through** *xtset idx* **and** *xtreg, re*

| | Coefficient | Std. err. | z | P>\|z\| | [95% conf. interval] |
|---|---|---|---|---|---|
| GrammGender | -.1427 | .0943 | -1.51 | .130 | [-.3275 ; .0420] |
| Language | .3482 | .0804 | 4.33 | .000*** | [.1906 ; .5058] |
| **GrammGenderxLanguage** | **-.5022** | **.1175** | **-4.28** | **.000*** ** | **[-.7324 ; -.2720]** |
| Control Variables | … | … | … | … | … |

# Variables influencing perceived femininity of countries

| Variable | Coefficient | Std. err. | z | P>\|z\| | [95% conf. interval] |
|---|---|---|---|---|---|
| FR_GrammaticalGender_M | -.6104 | .1075 | -56.800 | .0000*** | [-.8212 – -.3997] |
| HDI Index | -.5460 | .2225 | -24.500 | .0140* | [-.9820 – -.1100] |
| Life Expectancy | .4164 | .1800 | 23.100 | .0210* | [.0636 – .7692] |
| GDi Index | .3477 | .1757 | 19.800 | .0480* | [.0034 – .6920] |
| CO2 Emission per Capita | -.2784 | .1295 | -21.500 | .0320* | [-.5322 – -.0246] |
| Armed force / Population | .2243 | .1104 | 20.300 | .0420* | [.0078 – .4407] |
| Democratic Index | .1931 | .0854 | 22.600 | .0240* | [.0258 – .3605] |
| Longitude | .0025 | .0010 | 24.600 | .0140* | [.0005 – .0045] |
| FR_GrammaticalGender_M | -.0568 | .0741 | -.7700 | .4440 | -.2020 – .0884 |
| HDI Index | -.4741 | .2108 | -22.500 | .0250* | [-.8872 – -.0609] |
| Democratic Index | .1950 | .0817 | 23.900 | .0170** | [.0348 – .3551] |
| Female Workers | .1781 | .0839 | 21.200 | .0340** | [.0136 – .3426] |
| Sex Ratio | -.1765 | .0602 | -29.300 | .0030** | [-.2944 – -.0586] |
| Net migration / population | .1191 | .0511 | 23.300 | .0200* | [.0190 – .2193] |
| Climate Zone | -.0460 | .0148 | -31.100 | .0020** | [-.0750 – -.0170] |

FR_GrammaticalGender_M : The masculine gender is set as reference.

*(*) p<.05 (**) p<.01 (***) p<.001*

*Results showing the significant independent variables with femininity as the dependent variable.*
*Greyed lines illustrate results for French speakers and white lines for English speakers.*

# Variables influencing perceived masculinity of countries

| Variable | Coefficient | Std. err. | z | P>\|z\| | [95% conf. interval] |
|---|---|---|---|---|---|
| FR_GrammaticalGender_M | .5250 | .1-039 | 5.05 | .000*** | [.3213 – .7286] |
| Life Expectancy | -.3754 | .1740 | -2.16 | .031* | [-.7166 – -.0343] |
| FR_GrammaticalGender_M | .0462 | .0642 | .7200 | .4720 | -.0796 – .1719 |
| Climate Zone | .0403 | .0144 | 28.100 | .0050** | [.0122 – .0685] |
| Female Workers | -.1776 | .0815 | -21.800 | .0290* | [-.3373 – -.0178] |
| Average Elevation | .1039 | .0569 | 18.300 | .0680* | [-.0077 – .2154] |

FR_GrammaticalGender_M : The masculine gender is set as reference.

*(*) p<.05 (**) p<.01 (***) p<.001*

*Results showing the significant independent variables with masculinity as the dependent variable.*
*Greyed lines illustrate results for French speakers and white lines for English speakers.*

## Illustration

| | Masculinity_EN | Femininity_EN | Masculinity_FR | Femininity_FR |
|---|---|---|---|---|
| Poland | 3.8571 | 2.8571 | 2.3333 | 3.6666 |
| Colombia | 3.6 | 2.6 | 2.4 | 3.6 |

*Mean of responses on 5 points Likert scale*

# Managerial Implications

Help Destination Management Organizations to be aware of grammatical gender effect
→ Especially since destinations attract people who speak many different languages
→ Especially since destinations are more complex to manage than traditional brands

Help Destinations more broadly
→ Entertainment park, …

**Thank you**

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