BLUE BALANCE

Understanding how to approach/ engage coastal residents and tourists with sustainable coastal development in Belgium

2023-2024

By Marylise Schmid & Catho Vermeulen
Prof. Dr. Veroline Cauberghe, Prof. Dr. Thijs Bouman, Dr. Sara Vandamme

Reference: Schmid, M., Vermeulen C., Cauberghe,V. Bouman, T. & Vandamme, S. (2024). Report on the influence of key motivators, inhibitors and place attachment on sustainable coastal development support among coastal residents and tourists. Research report.

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  - Emotion
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Appendix 1: Survey responses on additional variables

References

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Section 1 - Survey

Part I – Methods & Sample

Online Survey

Sample 1: Flemish population (including coastal residents)

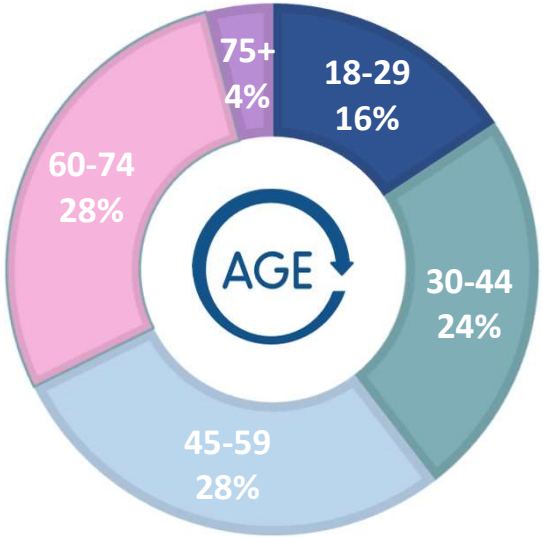
- Data collection via a panel (Bilendi) between 15/02/2023 and 21/02/2023
- Sample of N = 1392 respondents (18+ years old)
- Final sample following data cleaning: **N = 1051**

Sample 2: Coastal population

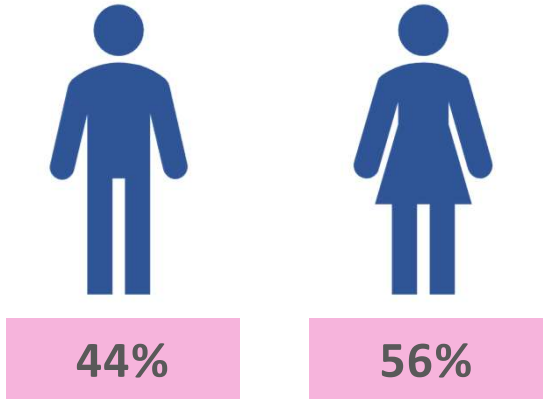
- Data collection via targeted communication within the coastal and polder communities (newsletters, facebook groups, etc.) between 16/02/2023 and 27/04/2023
- Sample of N = 1073 respondents (18+ years old)
- Final sample following data cleaning: **N = 622**

Demographics

- **Age**
- **Gender**
- Educational level
- Monthly net household income
- Work in marine sector
- Resident vs tourist
- Seaside visits



n = 1456



n = 1456

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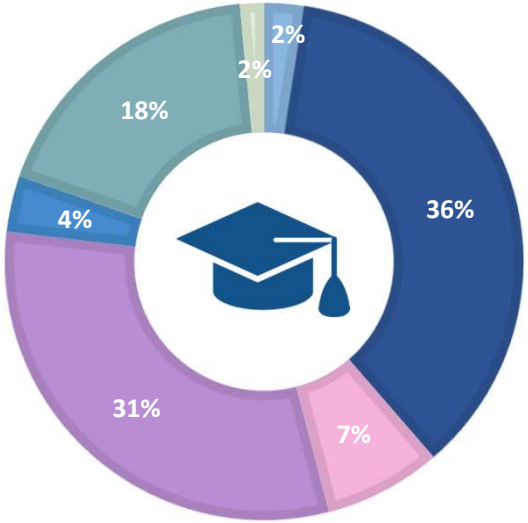
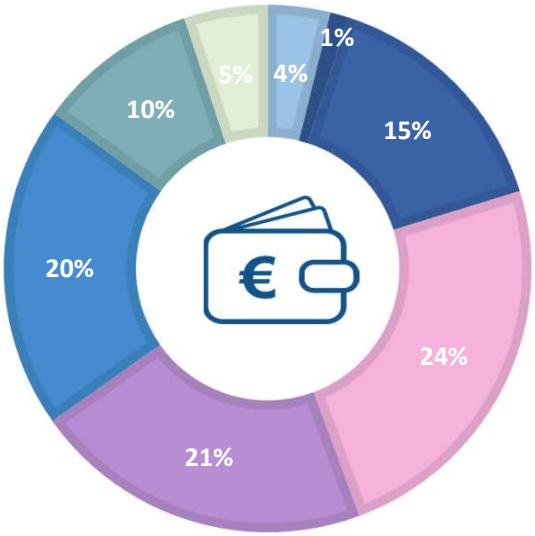
Demographics

- Age
- Gender
- **Educational level**
- **Monthly net household income**
- Work in marine sector
- Resident vs tourist
- Seaside visits



n = 1456

Less than high school
High school graduate
Higer vocational training
Professional bachelor
Academic bachelor
Master's degree
Doctoral degree



n = 1175

No income
< €1.000
€1.001 - €2.000
€2.001 - €3.000
€3.001 - €4.000
€4.001 - €5.000
€5.001 - €6000
> €6.000

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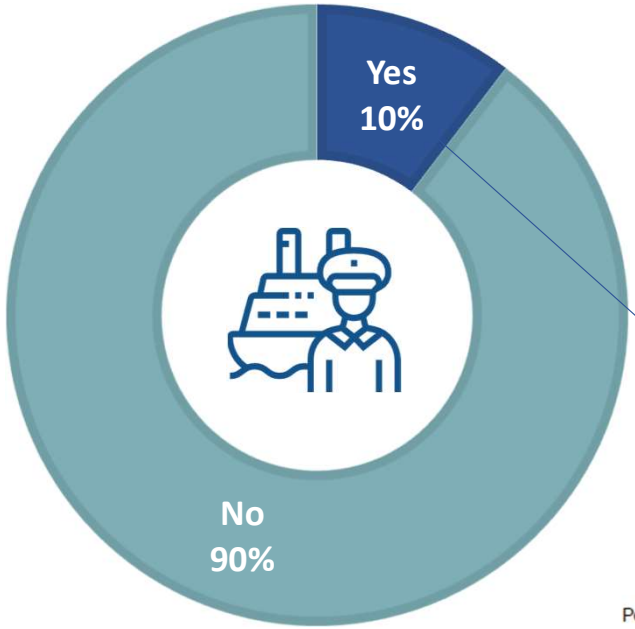
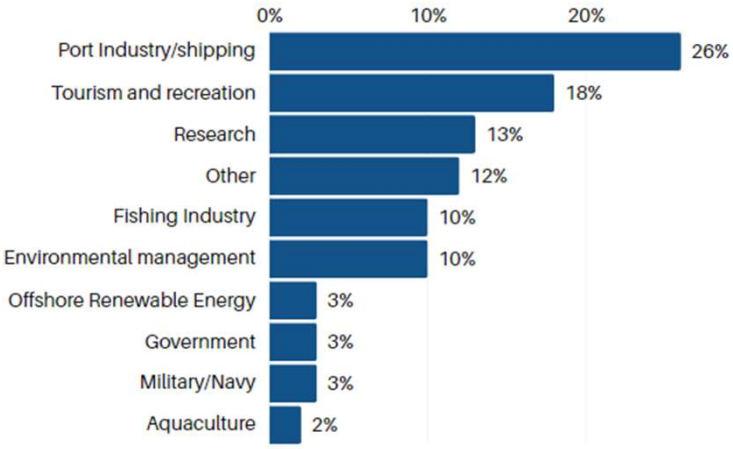
Demographics

- Age
- Gender
- Educational level
- Monthly net household income
- **Work in marine sector**
- Resident vs tourist
- Seaside visits



n = 1455

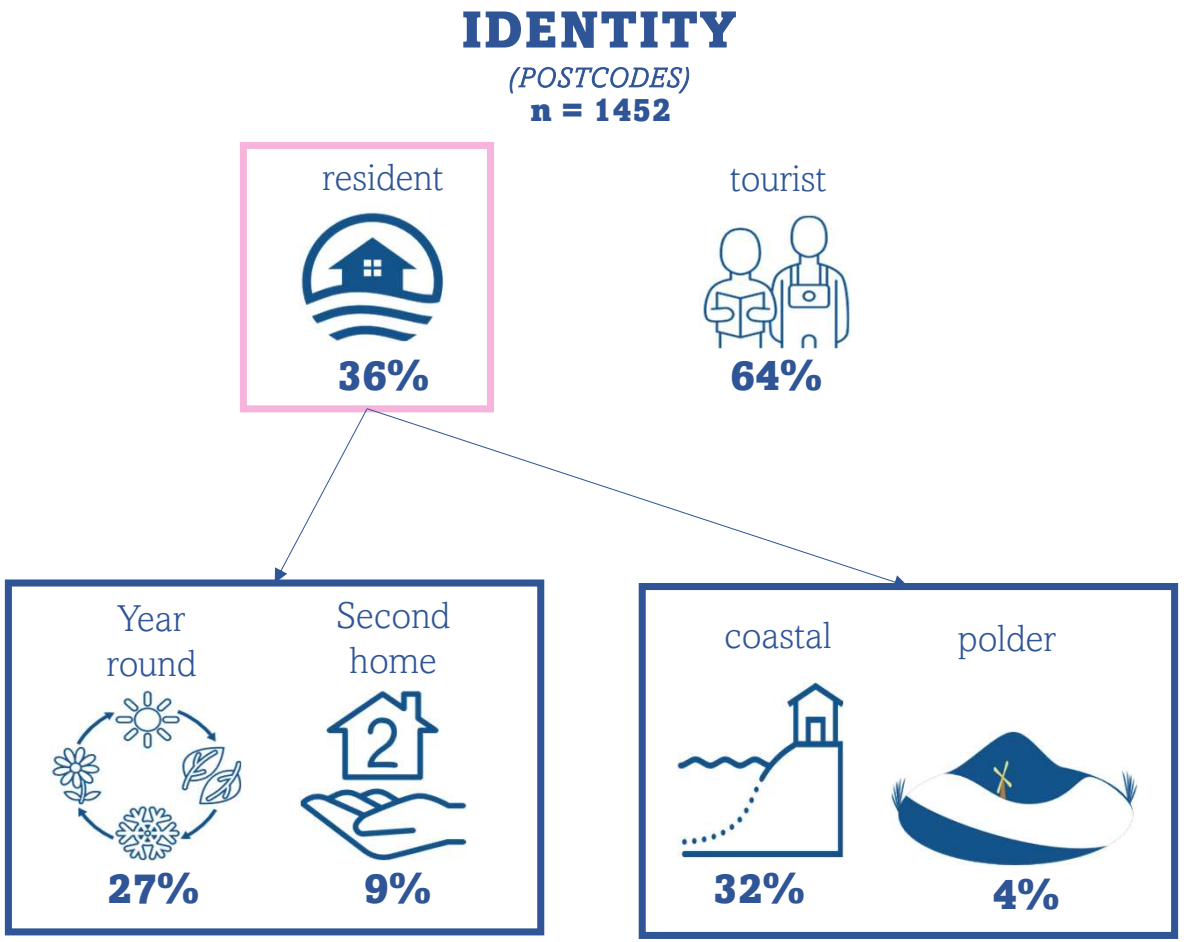
n = 151



BLUE BALANCE

Demographics

- Age
- Gender
- Educational level
- Monthly net household income
- Work marine sector
- **Resident vs tourist**
- Seaside visits



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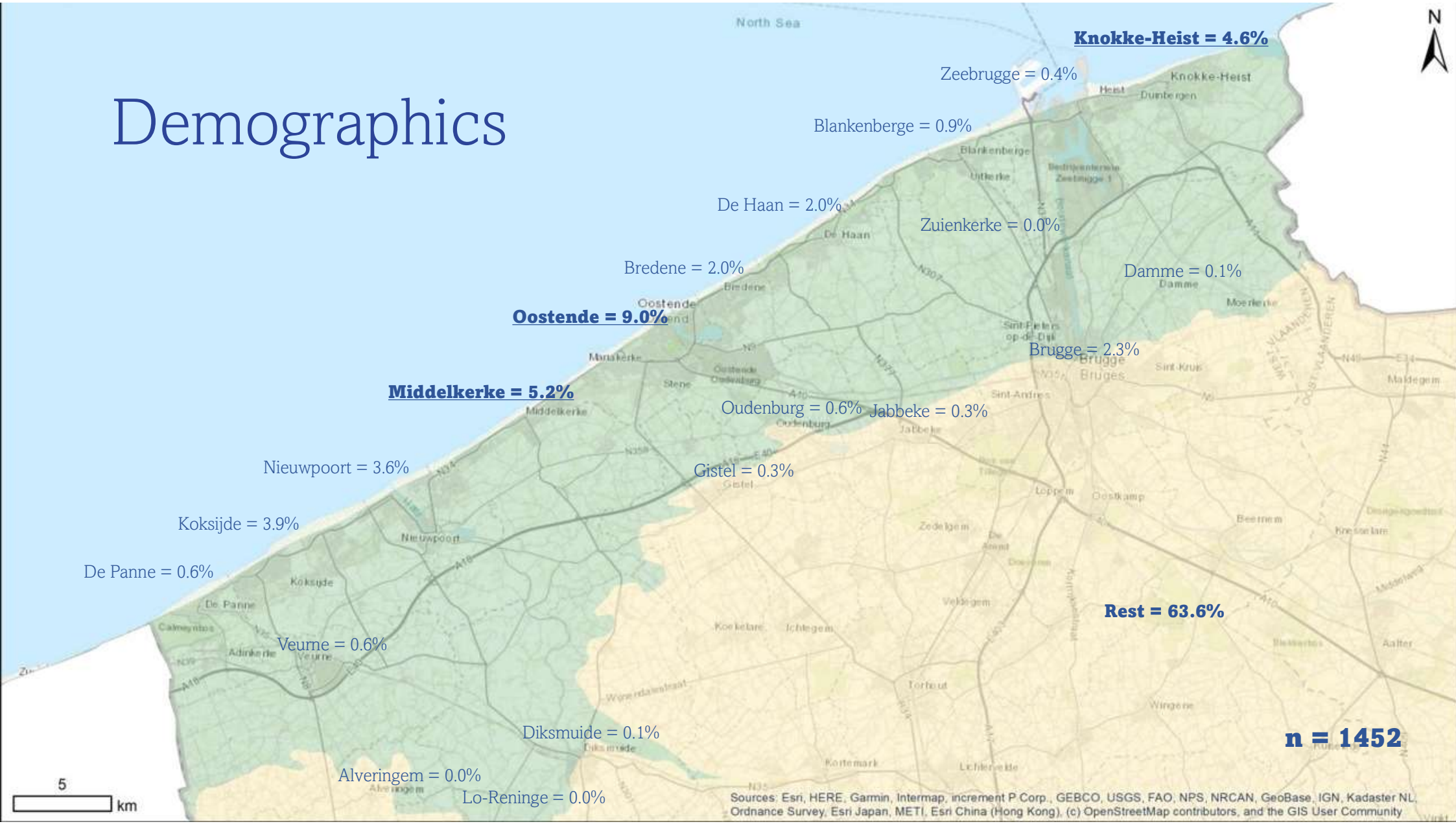
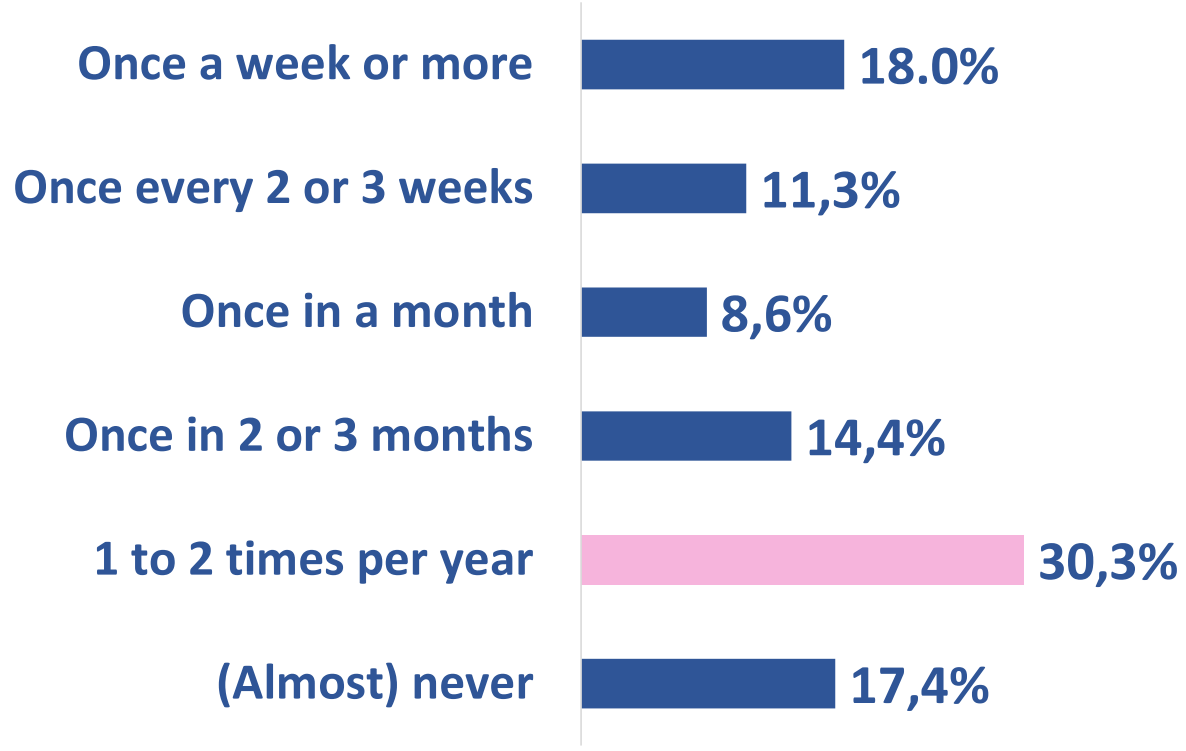
Demographics



Demographics

- Age
- Gender
- Educational level
- Monthly net household income
- Work in marine sector
- Resident vs tourist
- **Seaside visits**



n = 1673

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Section 1 - Survey

Part II – Results

Sustainable Coastal Development & Influencing Factors

Demographics

General:
- Age
- Gender
- Education
- Income

Related to the coast:
- Resident vs. tourist
- Number of visits
- Working sector

Internal variables

Personal Norm

Place attachment

Risk perception

External variables

Impact perception

Emotion toward projects

Trust

Influencing factors

Acceptability of blue transition projects

Pro-environmental behaviour at the coast

Sustainable Coastal Development & Influencing Factors

Necessary to keep the acceptance for the different projects **separate**

r = 0.074 r = 0.137 r = 0.105 r = 0.065 r = 0.062

- Quite **low correlations** between the projects and pro-environmental behaviour, meaning that the projects may not be perceived as sustainable (pro-environmental)?
- Highest correlation is between *dunes & dikes* and *pro-environmental behaviour (= the more people act pro-environmental, the more they also accept coastal protection projects)*

Possible to look at people's **overall pro-environmental behaviour**

Acceptability of blue transition projects

Pro-environmental behaviour at the coast

Notes

- The following influencing factors (also known as variables) are being further explored for academic research:
    - Personal and group values
    - Personal and group marine value orientations
    - Climax thinking

  As such, this report does not present the results from the analysis of these variables. Nevertheless, we have included the responses received from the survey in Appendix 1. If you have any questions regarding these specific variables (or any other questions), you can contact the researchers.

- Unless otherwise stated, all the results presented in Sections 1.2.2 to 1.2.9 are significant (at the level of $p < .001$).
- Small effects are referred to as 'slightly more/less', moderate effects as 'more/less', and large effects as 'much more/less'.
- On the slides comparing the distribution of responses between tourists and residents:
    - The blue scale represents a sequential scale from 'not at all' (light blue) to 'very often' (dark blue)
    - The red and green scale represents a dichotomous scale from 'strongly disagree' (bright red) to 'strongly agree' (bright green)

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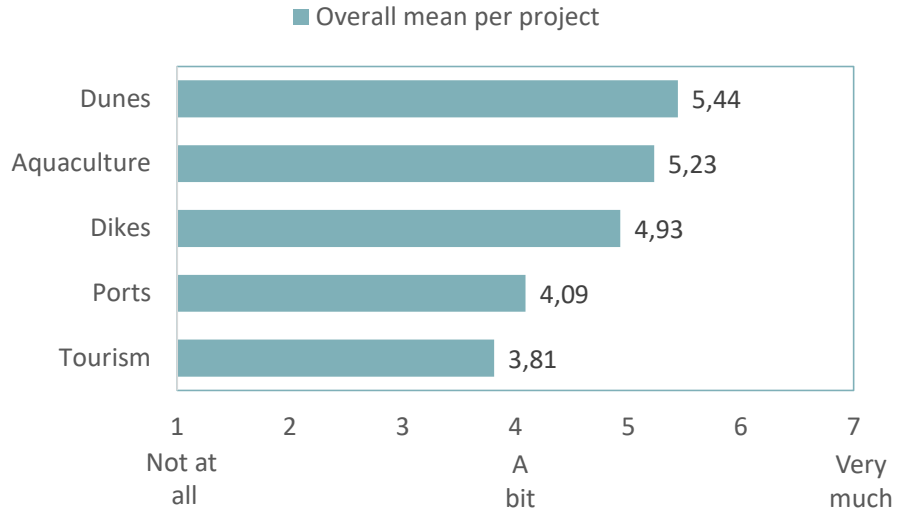
Acceptability

1. **General**
2. Residents vs tourists
3. Demographic differences

- Respondents **generally accepted** projects involving aquaculture, natural dunes and dikes. Expanding and heightening of natural **dunes** was the **most accepted** type of project followed by **aquaculture** and finally building new sea **dikes** and heightening existing ones.
- Respondents were **less accepting** of the development of **ports** and **tourism**, with tourism receiving the lowest level of acceptance.

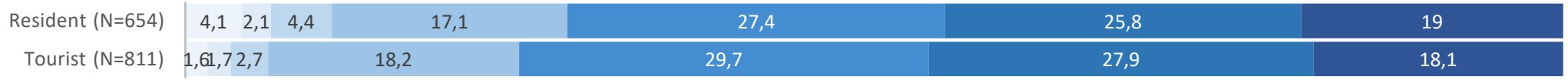


Note: Reported differences are significant at p < .001 level

Acceptability

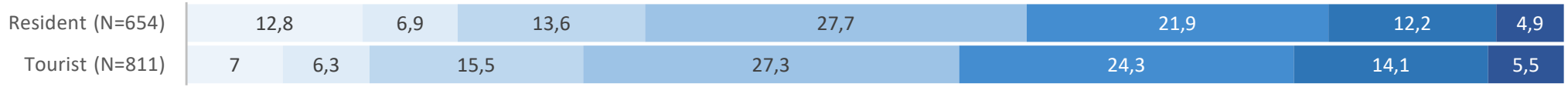
*I accept expanding and heightening **natural dunes** (up to 4m) in my local area/the places I like to visit at the Belgian coast.*

*I accept farming of mussels, oysters, seaweed in the North Sea (i.e**. aquaculture**).*

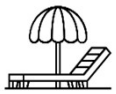


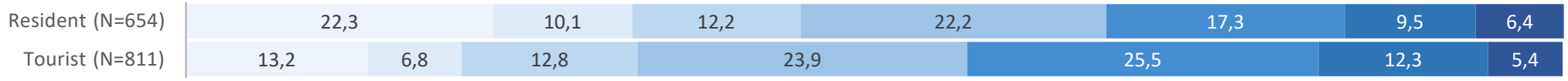
*I accept building new sea **dikes** and heightening existing ones in my local area/the places I like to visit at the Belgian coast.*

*I accept expanding **ports** to allow bigger ships for the development of new activities (e.g., seafood farming and wind farms at sea).*



*I accept promoting and developing **tourism** in less touristic areas of the Belgian coast.*





1 - not at all | 2 | 3 | 4 - a bit | 5 | 6 | 7 - very much

Acceptability

1. General
2. **Residents vs tourists**
3. Demographic differences

Residents are **slightly more likely to accept** the expansion and heightening of **natural dunes**, with **80% of residents** (vs. 75% of tourists) stating they accept such projects in their local/the places they like to visit at the Belgian coast.

Tourists are **slightly more likely to accept** the development of **tourism,** with **43.2% of tourists** (vs. 33.2% of residents) stating they accept it.

Tourists are also **very slightly more likely to accept** the expansion of **ports,** with **43.9% of tourists** (vs. 39% of residents) stating they accept it ($p = .003$).

Note: Reported differences are significant at $p < .001$ level (unless stated otherwise)

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Acceptability - Seaside Visits

1. General
2. Residents vs tourists
3. **Demographic differences**

People who **visit** the seaside **more frequently** are **slightly more** likely than non-regular visitors to **accept coastal protection** projects, especially the expansion and heightening of natural **dunes**.
People who **visit** the seaside **most frequently** are the **least likely** to **accept** the development of **aquaculture**, **ports** and **tourism.**

Note: Reported differences are significant at p < .001 level

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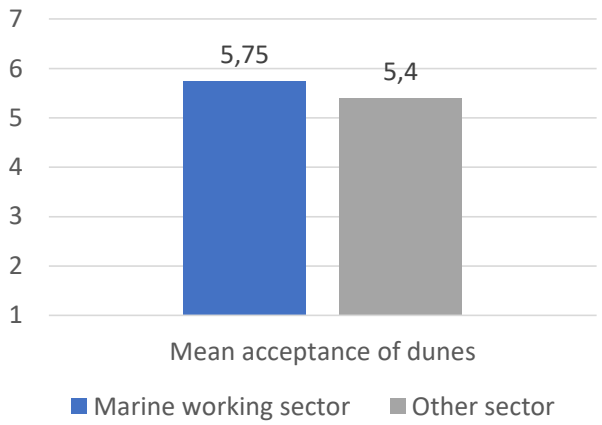
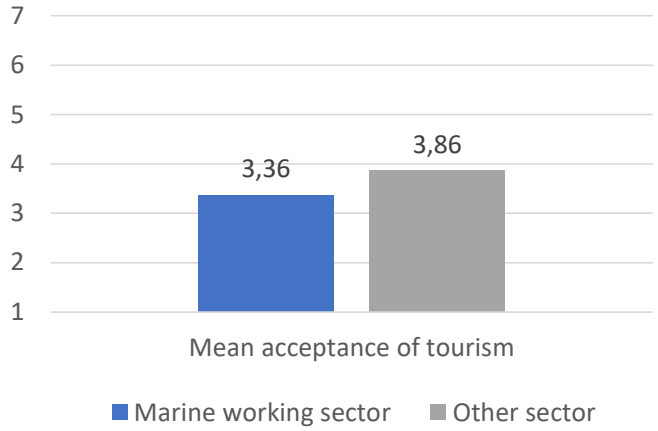
Acceptability – Working Sector

1. General
2. Residents vs tourists
3. **Demographic differences**



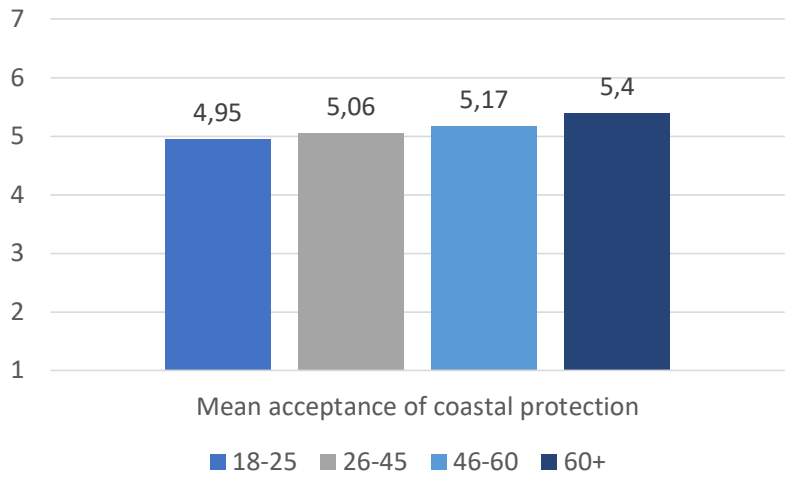


Individuals employed (or with previous experience) in the **marine sector** tend to **accept** the expansion and heightening of **natural dunes slightly more** than people who have never worked in this sector. **Conversely**, in the context of **tourism development**, individuals with a marine sector background tend to show **slightly lower levels of acceptance**.

Note: Reported differences are significant at p < .001 level

Acceptability - Age

1. General
2. Residents vs tourists
3. **Demographic differences**

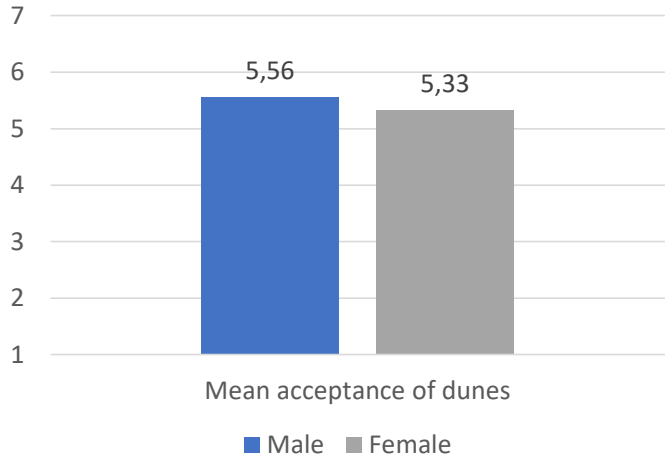


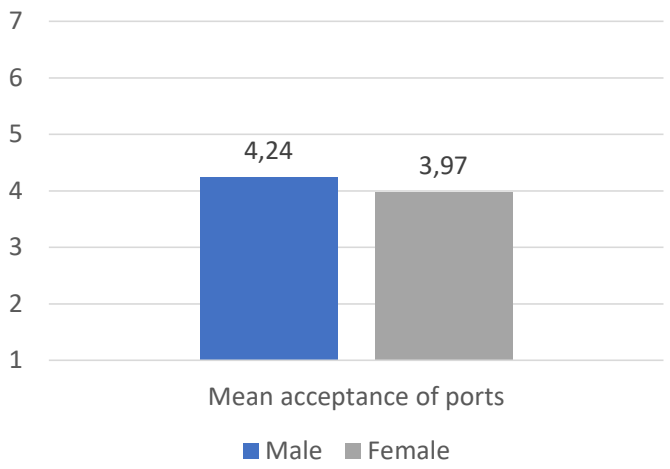
The **older** people are, the **slightly more** they **accept natural dunes and dikes (i.e., coastal protection)**

Note: Reported differences are significant at p < .001 level

Acceptability - Gender

1. General
2. Residents vs tourists
3. **Demographic differences**





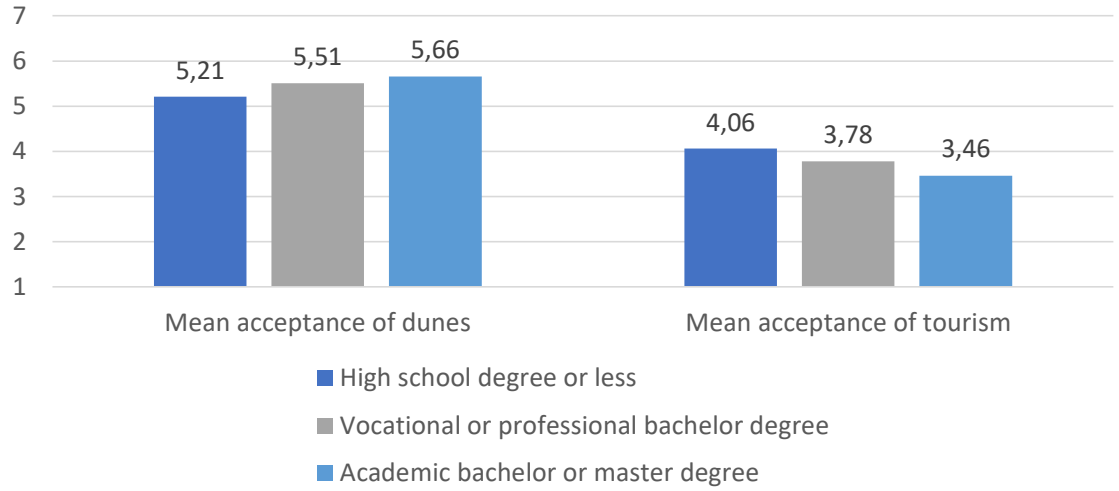
Men are **very slightly more likely to accept** the expansion and heightening of **natural dunes** and the development of **ports** than women.

Note: Reported differences are significant at p < .001 level

BLUE BALANCE

Acceptability - Education

1. General
2. Residents vs tourists
3. **Demographic differences**



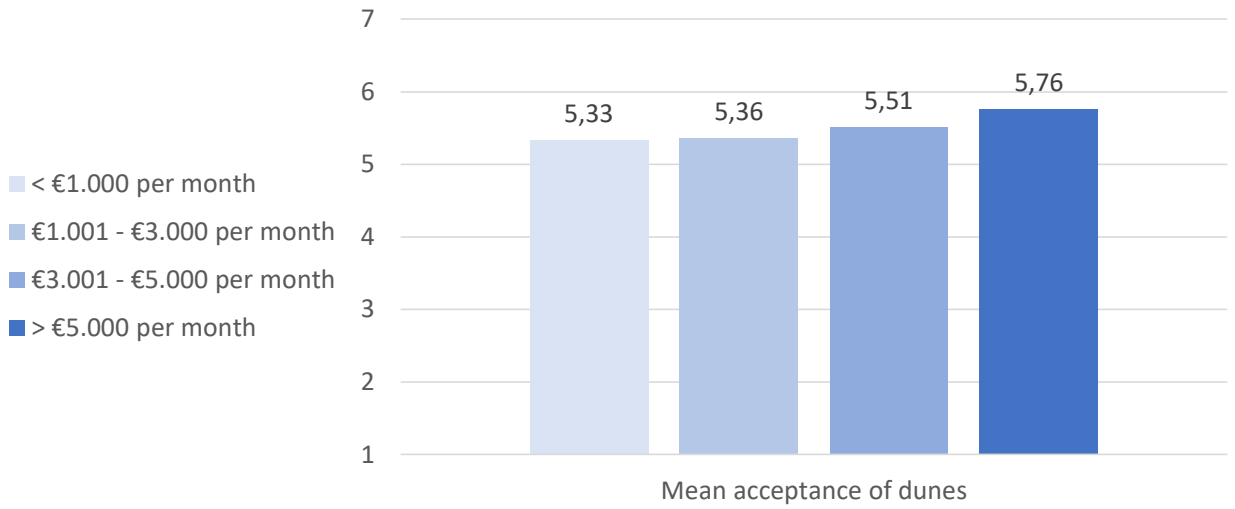
When comparing individuals with the highest and lowest levels of education, those with the **highest education** tend to show **a slightly higher degree of acceptance** the expansion of natural **dunes**, but they also exhibit a **slightly higher degree of reluctance** for further **tourism** development.

Note: Reported differences are significant at p < .001 level

BLUE BALANCE

Acceptability - Income

1. General
2. Residents vs tourists
3. **Demographic differences**



Individuals with the **highest income levels** tend to exhibit a **slightly higher level of acceptance** for the expansion of natural **dunes** (p = .006), which is **consistent** with the trend observed among individuals with the **highest educational background.**

Note: Reported differences are significant at p < .001 level (unless stated otherwise)

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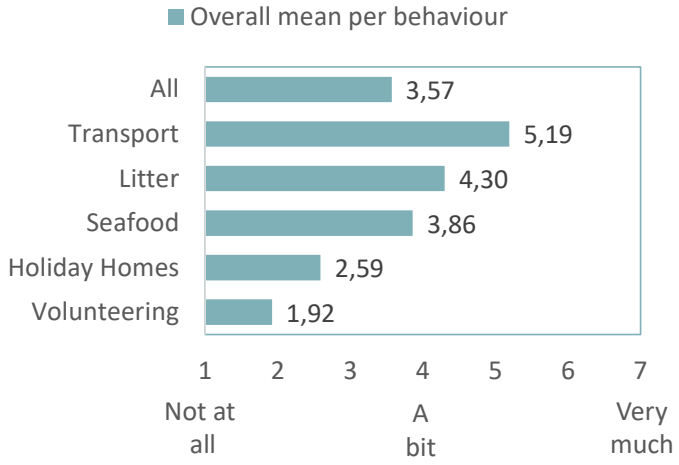
Pro-environmental Behaviour

1. General
2. Residents vs tourists
3. Demographic differences

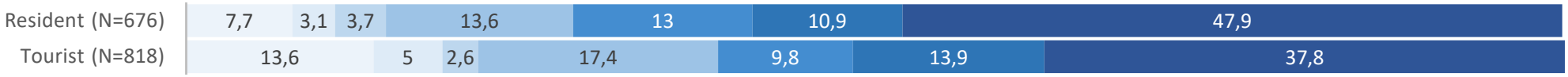
- Overall respondents **do not report acting much** in a pro-environmental way related to coastal behaviours.
- Using sustainable modes of **transport** followed by **picking up litter** at the beach were reported as the **most** highly performed behaviours.
- **Volunteering** for an environmental organisation related to the Belgian coastal area, choosing **eco-friendly holiday homes** and **eating sustainable seafood** were reported as **the least** highly performed behaviours.



Note: Reported differences are significant at p < .001 level

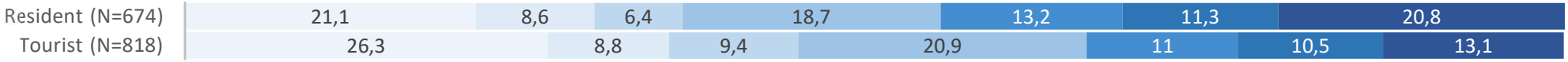
Pro-environmental Behaviour – Resident vs Tourists

*When you travel around in the Belgian coastal area, do you use sustainable modes of **transport** (walk, cycle, public transport)?*

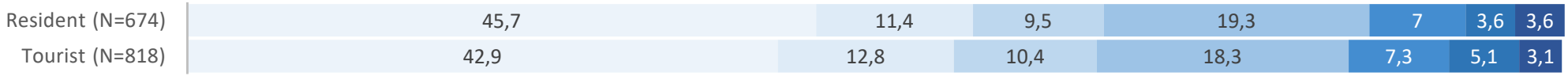


*When you are at the beach and see **litter**, do you pick it up and throw it in the bin?*

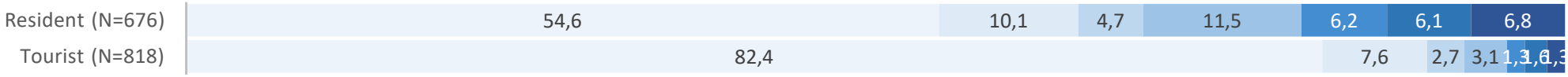
*When you eat **seafood**, do you choose sustainable options (eco-labelled products, locally-sourced, and avoid overfished species)?*



*When you go on a holiday/weekend trip to the Belgian coast, do you choose to stay at eco-friendly **holiday homes**?*



*Have you ever **volunteered** for environmental organizations related to the Belgian coastal area (e.g. beach clean-ups...)?*



1 - not at all | 2 | 3 | 4 - a bit | 5 | 6 | 7 - very often

Pro-environmental Behaviour

1. General
2. **Residents vs tourists**
3. Demographic differences

Overall, residents report acting **more** pro-environmentally than tourists. These differences are significant but **small** for using sustainable modes of **transport** at the coast (**71,8%** of residents vs. 61,5% of tourists), **picking up litter** (**51,2%** of residents vs. 38,3% of tourists) at the beach and eating sustainable **seafood** (**45,3%** of residents vs. 34,6% of tourists), and **moderate** for **volunteering** at an environmental organisation related to the Belgian coastal area (**19,1%** of residents vs. 4,2% of tourists).

No significant differences were found between residents and tourists for choosing **eco-friendly holiday homes**.

Note: Reported differences are significant at p < .001 level

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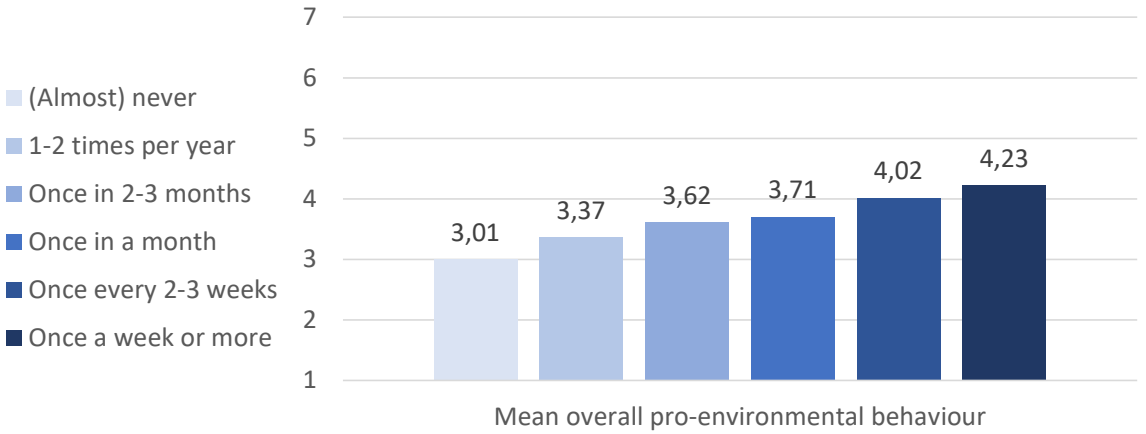
Pro-environmental Behaviour - Seaside visits

1. General
2. Residents vs tourists
3. **Demographic differences**



Individuals who **visit** the seaside **more frequently** report acting **more pro-environmentally**, with the **exception of choosing eco-holiday homes** for which no significant difference is observed. While this trend is expected for those who rarely or almost never visit the coast, the **difference remains significant** even when comparing individuals who visit the coast once a month to those who go once a week or more.

Note: Reported differences are significant at p < .001 level

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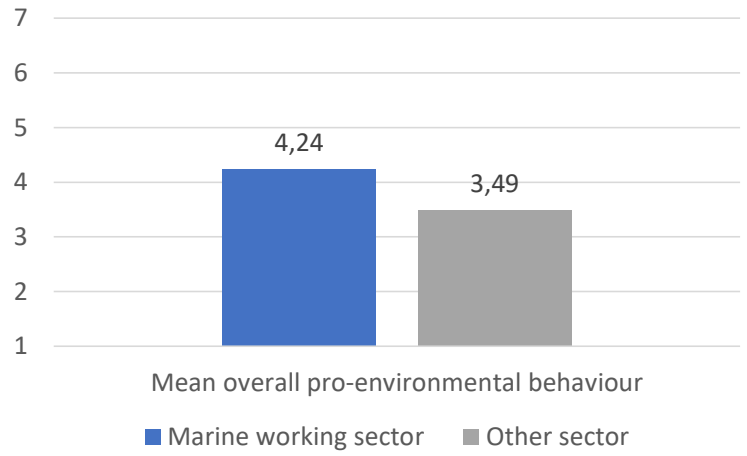
Pro-environmental Behaviour - Working sector

1. General
2. Residents vs tourists
3. **Demographic differences**



Individuals employed (or with previous experience) in the **marine sector** report acting **more pro-environmentally** compared to individuals in other sectors.

Note: Reported differences are significant at p < .001 level

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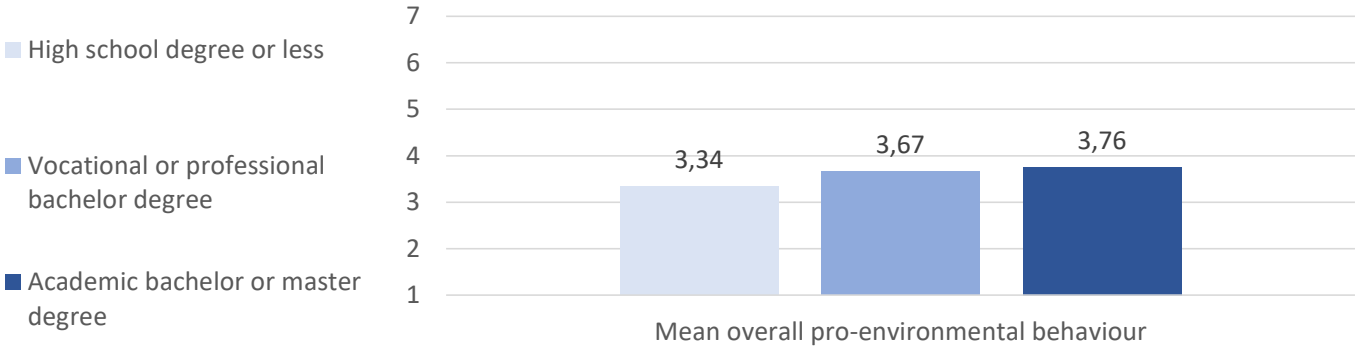
Pro-environmental Behaviour - Education

1. General
2. Residents vs tourists
3. **Demographic differences**



People with the **lowest educational background** report **slightly lower levels of pro-environmental behaviours** related to the coast.

Note: Reported differences are significant at p < .001 level

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Personal Norm

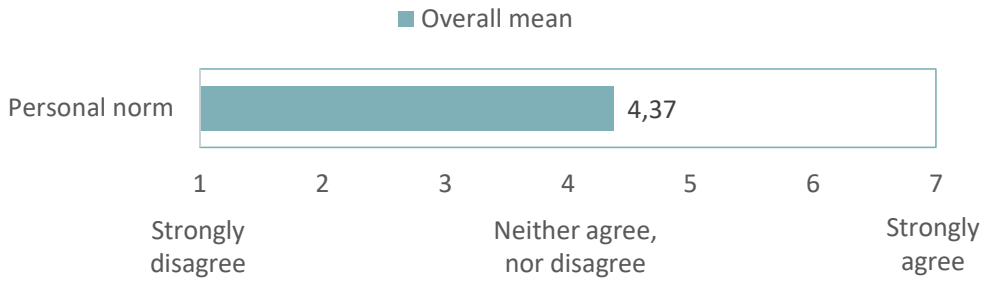
1. **General**
2. Residents vs tourists
3. Demographic differences
4. Effect on acceptability
5. Effect on pro-environmental behaviour

Note: Reported differences are significant at p < .001 level

*A **personal norm** is a feeling of moral obligation that gives direction to people's intentions and behaviour in a certain situation. It is well known that a strong personal norm can influence someone's pro-environmental actions. For this survey, the personal norm is applied to the ocean's health and how responsible people feel.*

Jansson & Dorrepaal, 2015; Schwartz, 1977

Overall respondents feel **relatively neutral** in terms of **taking responsibility** for the **health of the North Sea:**



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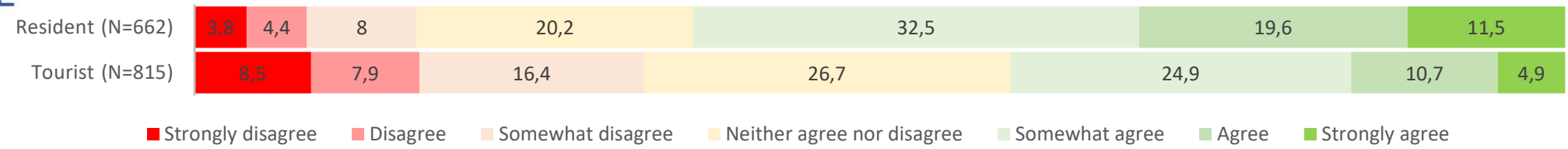
Personal Norm – Resident vs Tourist

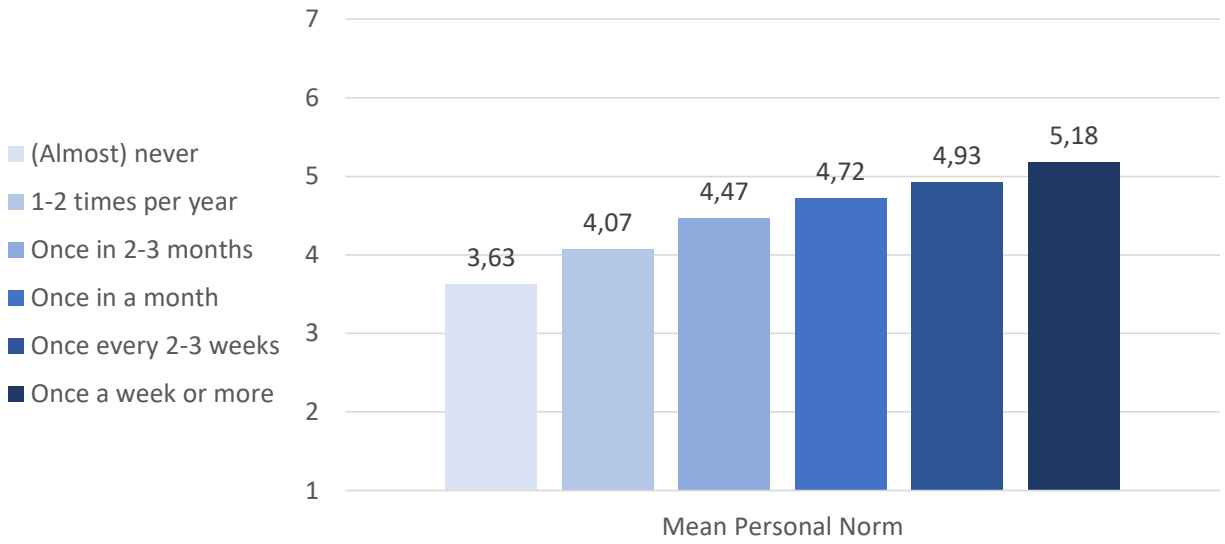
I feel a personal responsibility to try to improve the health of the North Sea.



Residents have a **higher** personal norm than tourists, with **63,6%** of residents (vs. 40,5% of tourists) stating that **they feel a personal responsibility** to try to improve the health of the North Sea.

Personal Norm – Seaside visits

1. General
2. Residents vs tourists
3. **Demographic differences**
4. Effect on acceptability
5. Effect on pro-environmental behaviour



Those who **visit the seaside more frequently** exhibit a **much stronger personal norm** related to the North Sea's health. This underscores the influential role that spending time by the sea has in shaping people's environmental concerns.

Note: Reported differences are significant at p < .001 level

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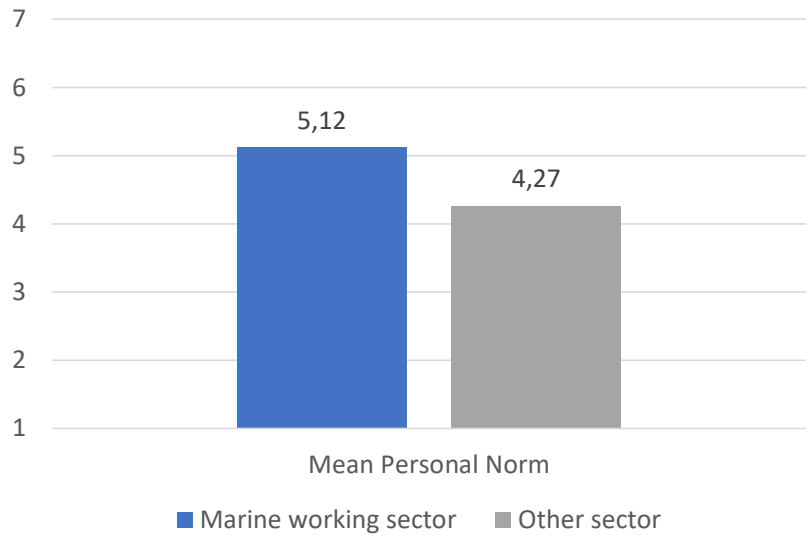
Personal Norm – Working sector

1. General
2. Residents vs tourists
3. **Demographic differences**
4. Effect on acceptability
5. Effect on pro-environmental behaviour



Individuals employed (or with previous experience) in the **marine sector** have a **higher personal norm** compared to those who do not work in this sector. This suggests that working in the marine sector may have a meaningful impact on personal norms.

Note: Reported differences are significant at p < .001 level

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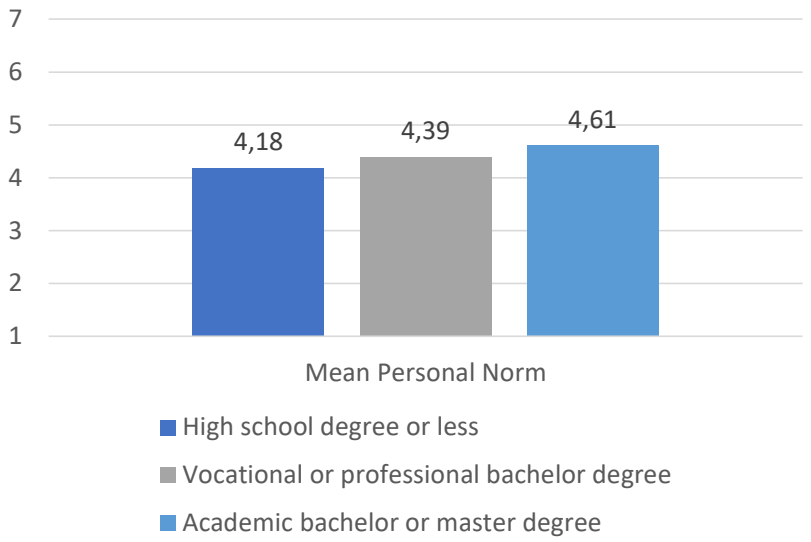
Personal Norm – Education

1. General
2. Residents vs tourists
3. **Demographic differences**
4. Effect on acceptability
5. Effect on pro-environmental behaviour



More **highly educated** feel a **slightly higher** responsibility for the health of the North Sea.

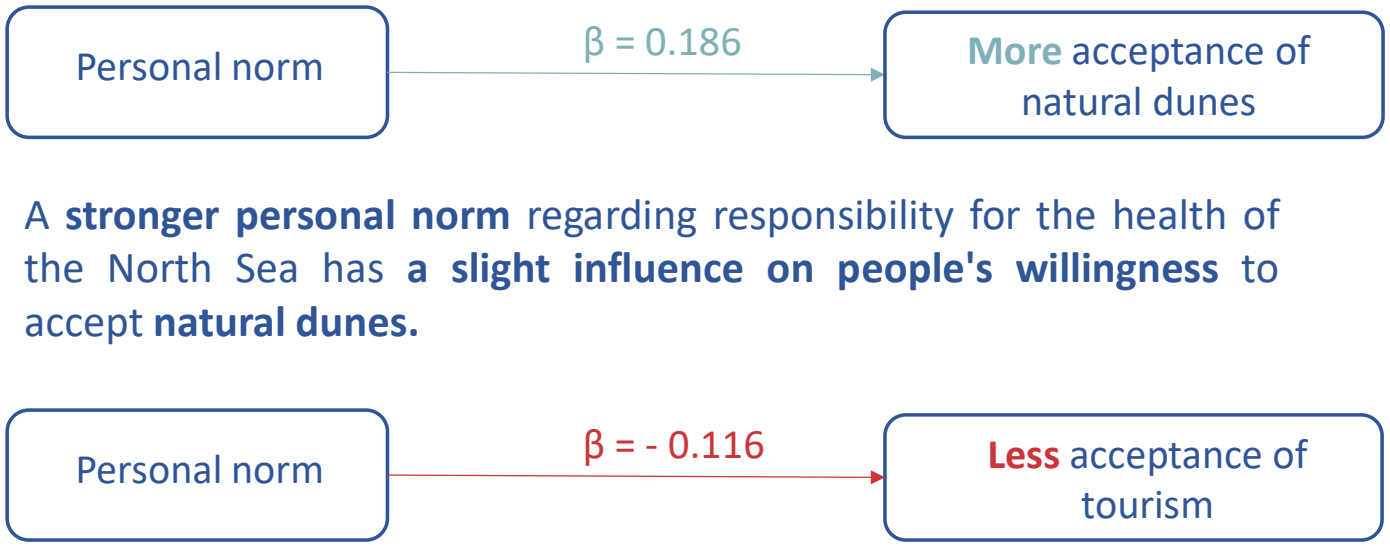
Note: Reported differences are significant at p < .001 level

BLUE BALANCE

Personal Norm

1. General
2. Residents vs tourists
3. Demographic differences
4. **Effect on acceptability**
5. Effect on pro-environmental behaviour

Note: Reported differences are significant at p < .001 level



A **stronger personal norm** regarding responsibility for the health of the North Sea has **a slight influence on people's willingness** to accept **natural dunes.**

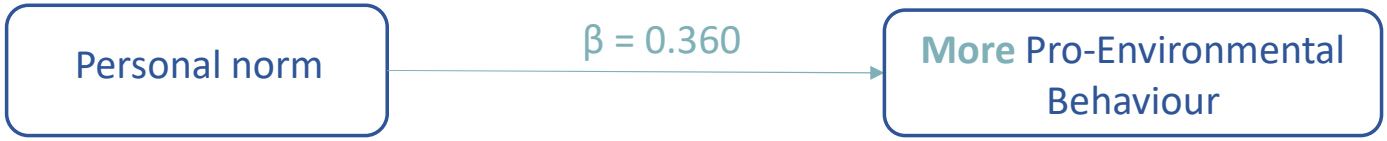
A **stronger personal norm** related to caring for the North Sea's health **has a slight influence on people's reluctance** to embrace further **tourism development** in less touristic areas.

Note: for the other acceptability projects, no significant effect was found

BLUE BALANCE

Personal Norm

1. General
2. Residents vs tourists
3. Demographic differences
4. Effect on acceptability
5. **Effect on pro-environmental behaviour**



The **higher people's personal norm** to take responsibility for the North Sea's health, **the more they also act** in a pro-environmental way related to the coast. (The effect of personal norm is moderate to large.)

Note: Reported differences are significant at p < .001 level

BLUE BALANCE

Place Attachment

1. **General**
2. Residents vs tourists
3. Demographic differences
4. Effect on acceptability
5. Effect on pro-environmental behaviour

Note: Reported differences are significant at p < .001 level

***Place attachment** is a positive emotional bond between people and a specific place, including the places they live in or visit frequently. It is often conceptualised as having two subdimensions:*

- ***Place identity** = a symbolic attachment to a place, whereby individuals define themselves through a given place*
- ***Place dependence** = a more instrumental or functional connection to a place, based on its ability to provide for an individual's needs and allow goal achievement.*

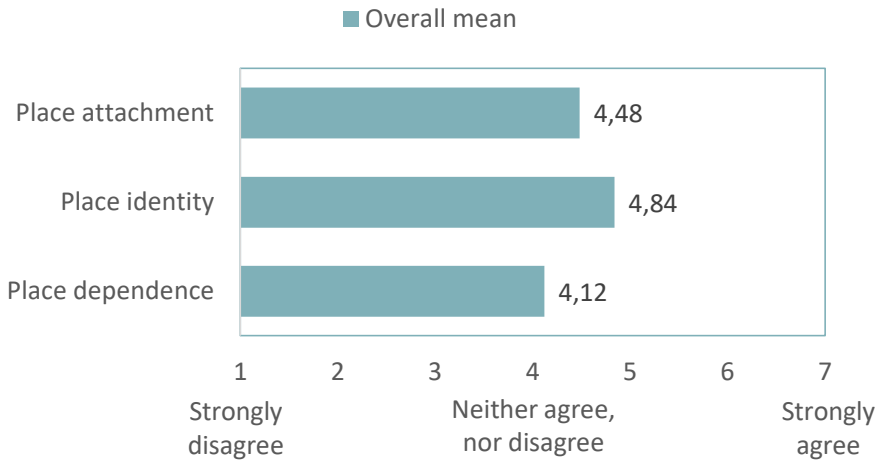
Masterson et al., 2017 and Boley et al., 2021

BLUE BALANCE

Place Attachment

1. **General**
2. Residents vs tourists
3. Demographic differences
4. Effect on acceptability
5. Effect on pro-environmental behaviour

Overall respondents are **somewhat attached** to the Belgian coast. Furthermore, respondents have a **higher** average **place identity** than place dependence.

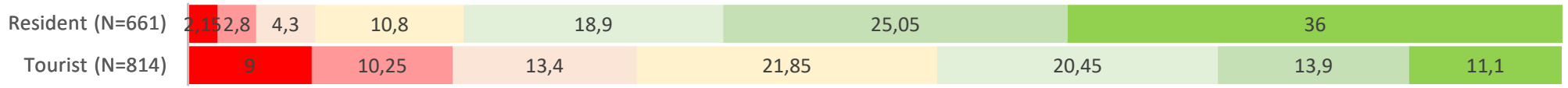


Note: Reported differences are significant at p < .001 level

Place Attachment – Resident vs Tourist

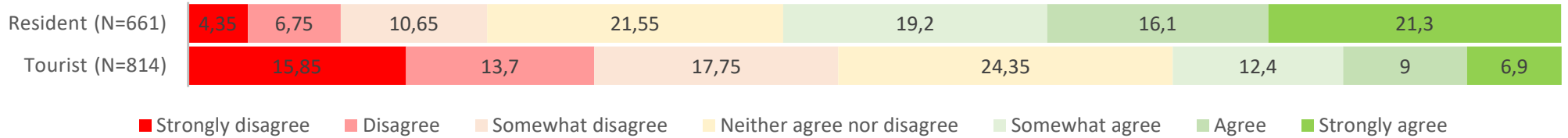
Place Identity

I am very attached to the Belgian coast.
The Belgian coast is very special to me.



Place Dependence

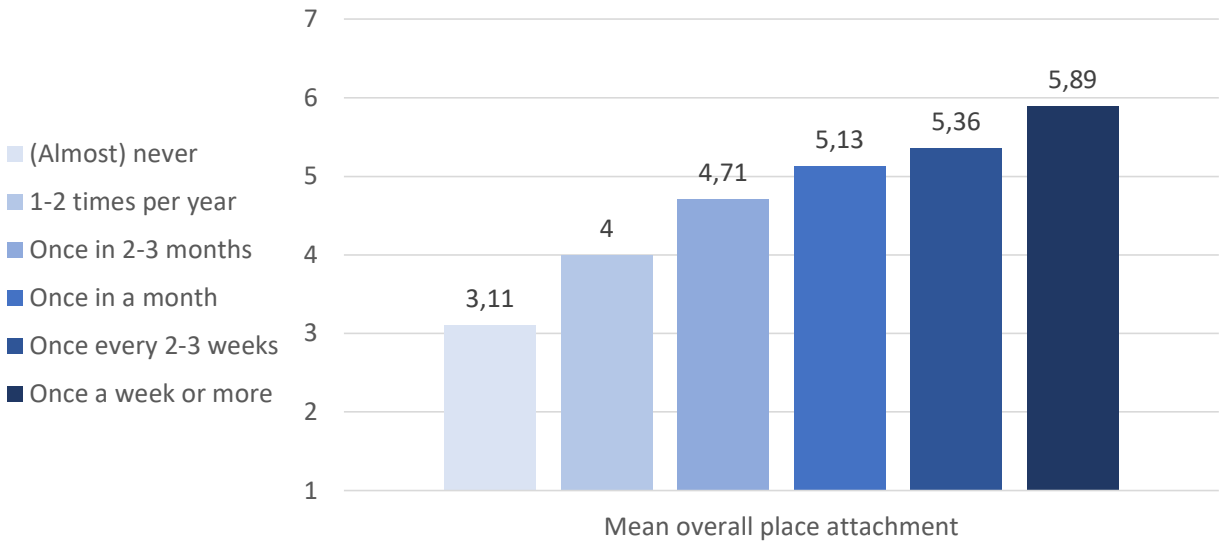
The Belgium coast is the best place in Belgium for what I like to do.
No other place to [live in/visit] in Belgium can compare to the Belgian coast.



Residents are **much more attached** to the Belgian coast than tourists, with **80% of residents** (vs. 45,5% of tourists) stating they **identify** with the Belgian coast and **56,6%** of **residents** (vs. 28,3% of tourists) stating they **depend** on the Belgian coast.

Place Attachment - Seaside visits

1. General
2. Residents vs tourists
3. **Demographic differences**
4. Effect on acceptability
5. Effect on pro-environmental behaviour



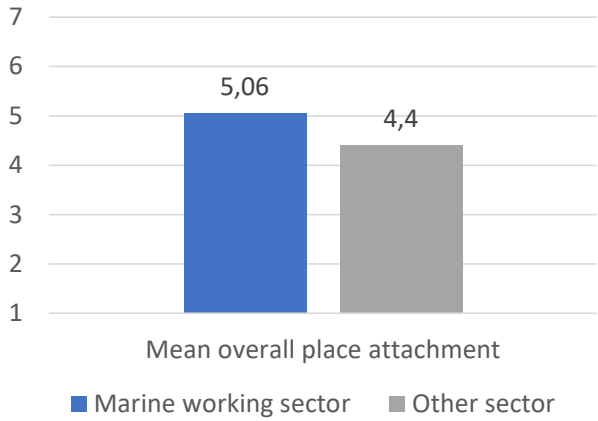
Those who **visit the seaside more frequently** have a **much stronger overall attachment to the Belgian Coast.**

Note: Reported differences are significant at p < .001 level

BLUE BALANCE

Place Attachment - Working sector

1. General
2. Residents vs tourists
3. **Demographic differences**
4. Effect on acceptability
5. Effect on pro-environmental behaviour



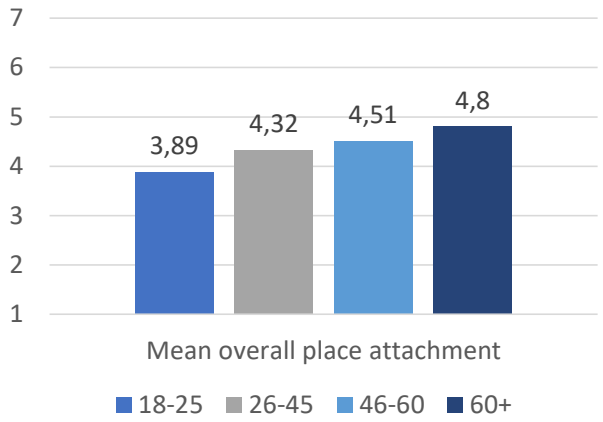
Individuals employed (or with previous experience) in the **marine sector** have a **stronger overall attachment to the Belgian Coast.**

Note: Reported differences are significant at p < .001 level

BLUE BALANCE

Place Attachment - Age

1. General
2. Residents vs tourists
3. **Demographic differences**
4. Effect on acceptability
5. Effect on pro-environmental behaviour

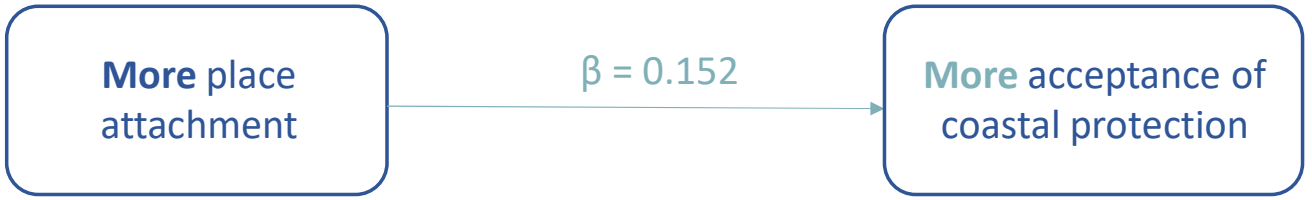


The **older** people are, the **slightly more attached** they are to the Belgian coast. This is likely because they have had more time to develop a bond with this place.

Note: Reported differences are significant at p < .001 level

Place Attachment

1. General
2. Residents vs tourists
3. Demographic differences
4. **Effect on acceptability**
5. Effect on pro-environmental behaviour



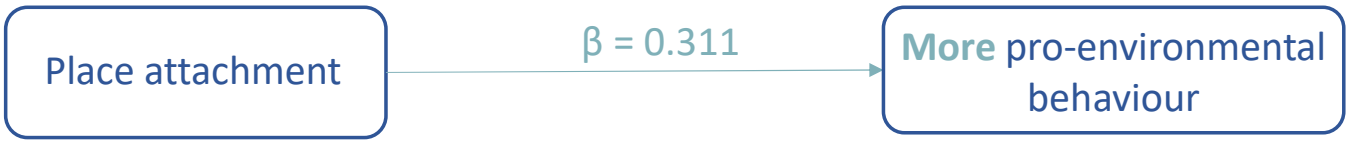
The **more people are attached with the Belgian coast**, **the slightly more they accept** the expansion and heightening of **dunes and dikes**, also known as **coastal protection.**

Note: Reported differences are significant at p < .001 level

BLUE BALANCE

Place Attachment

1. General
2. Residents vs tourists
3. Demographic differences
4. Effect on acceptability
5. **Effect on pro-environmental behaviour**



The **more people are attached to** the Belgian coast, **the more they also act in a pro-environmental way** related to the coast.

Note: Reported differences are significant at p < .001 level

Risk Perception

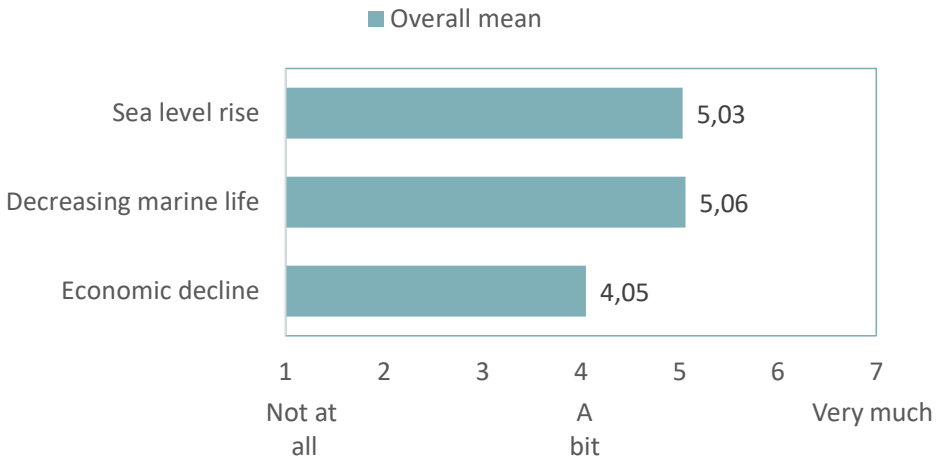
1. **General**
2. Residents vs tourists
3. Demographic differences
4. Effect on acceptability
5. Effect on pro-environmental behaviour

Note: Reported differences are significant at p < .001 level

***Risk perceptions** are individuals' assessments or beliefs concerning potential harm or the likelihood of experiencing a negative outcome, in this case of natural and economic phenomena.*

Molina et al., 2013

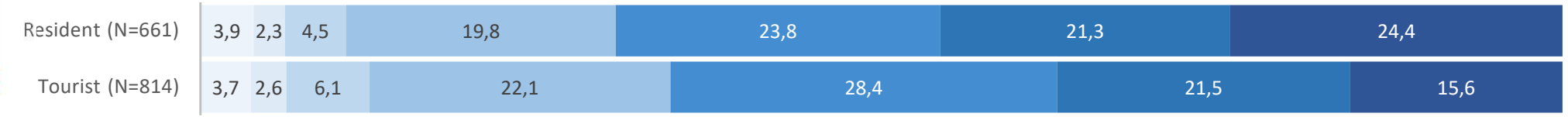
Overall, respondents are **more worried about nature-related risks** (sea level rise and decreasing marine life) **than economic decline.**



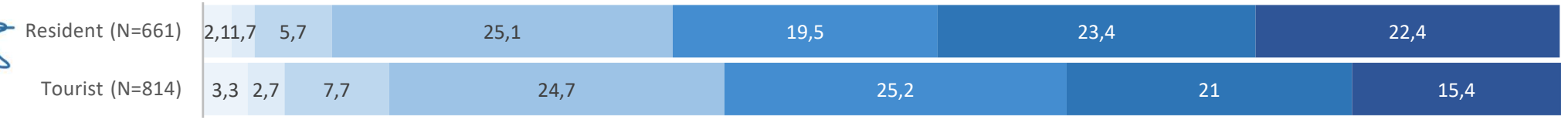
BLUE BALANCE

Risk perception – Resident vs Tourist

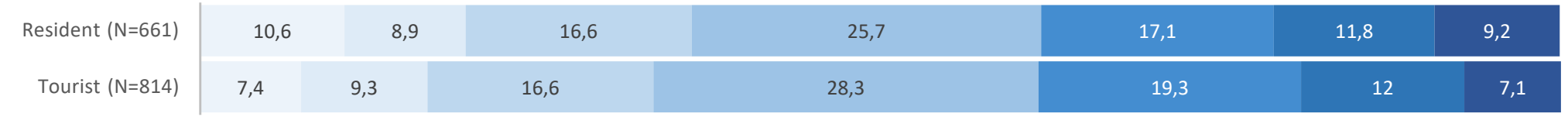
How worried are you that the sea level of the North Sea will rise (leading to storm damage and flooding)?



How worried are you that marine life will decrease?



How worried are you that the Belgian coast will suffer economic decline and become less attractive?



1 - not at all | 2 | 3 | 4 - a bit | 5 | 6 | 7 - very much

BLUE BALANCE

Risk perception – Resident vs Tourist

1. General
2. **Residents vs tourists**
3. Demographic differences
4. Effect on acceptability
5. Effect on pro-environmental behaviour

Note: Reported differences are significant at p < .001 level

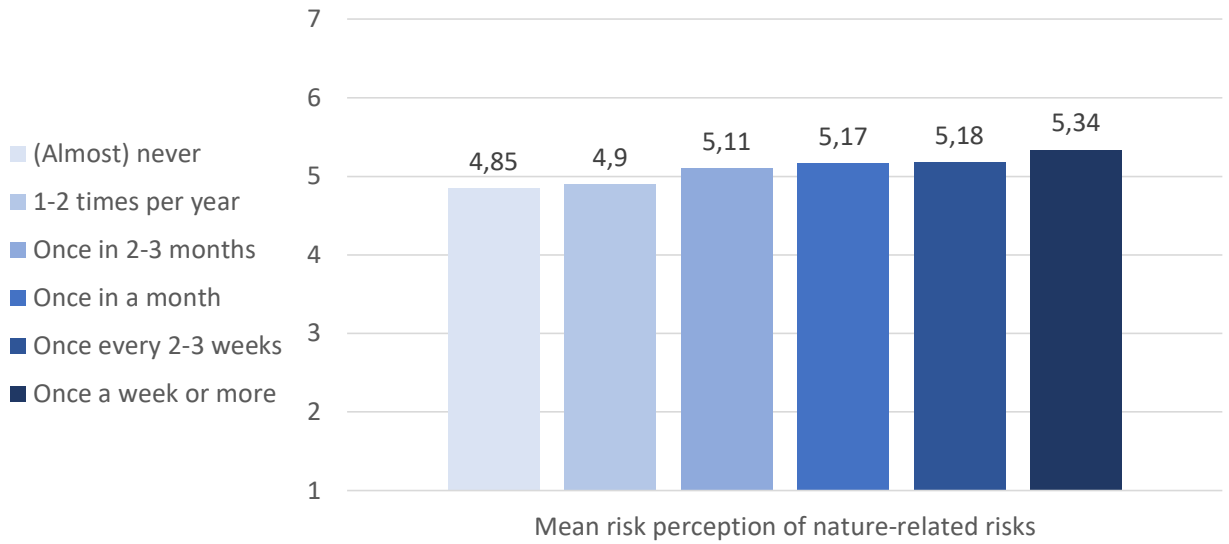
Residents are **slightly more** worried about **nature-related risks**, with:
- **69,5%** of residents (vs. 65,5% of tourists) stating they worry about **sea level rise**, and
- **65,3%** of residents (vs. 61,6% of tourists) stating they worry about **decreasing marine life**.

No significant difference between residents and tourists on how they perceive the risk of **economic decline.**

BLUE BALANCE

Risk Perception - Seaside visits

1. General
2. Residents vs tourists
3. **Demographic differences**
4. Effect on acceptability
5. Effect on pro-environmental behaviour



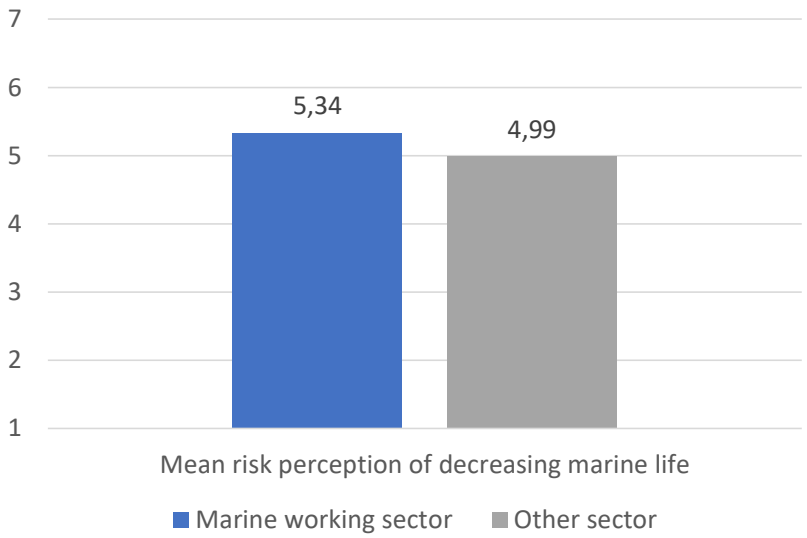
Those who visit the coastline **once a week or more** are **slightly more** worried about **nature related risks** (sea level rise and decreasing marine life) than those who (almost) **never** visit the coast **or only once or twice** a year.

Note: Reported differences are significant at p < .001 level

BLUE BALANCE

Risk Perception - Working sector

1. General
2. Residents vs tourists
3. **Demographic differences**
4. Effect on acceptability
5. Effect on pro-environmental behaviour



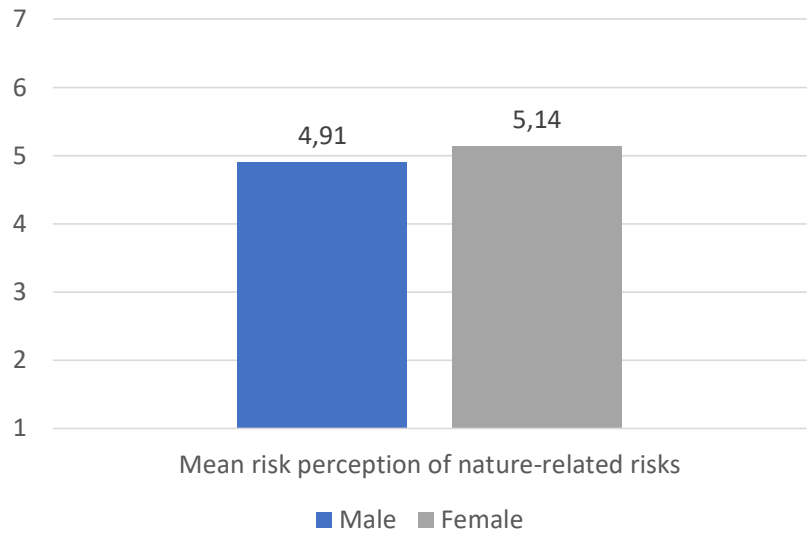
Individuals employed (or with previous experience) in the **marine sector** tend to be **slightly more** worried about **decreasing marine life**.

Note: Reported differences are significant at p < .001 level

BLUE BALANCE

Risk Perception - Gender

1. General
2. Residents vs tourists
3. **Demographic differences**
4. Effect on acceptability
5. Effect on pro-environmental behaviour



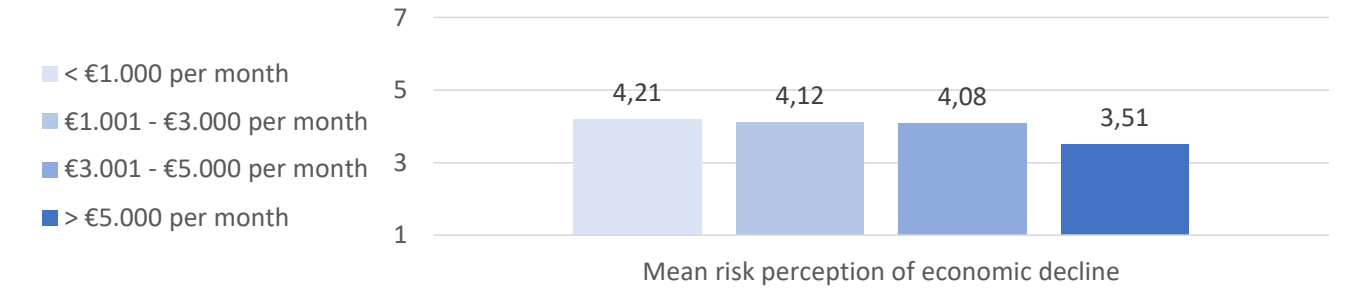
Women tend to be **slightly more** worried about **nature-related risks** (sea level rise and decreasing marine life)

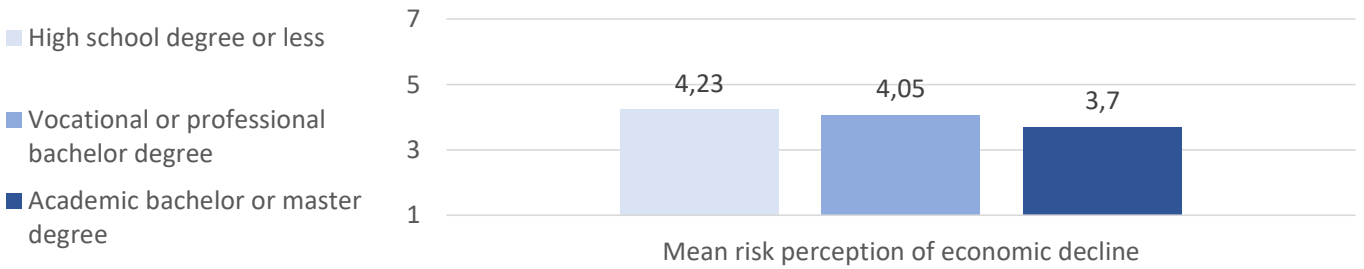
Note: Reported differences are significant at p < .001 level

BLUE BALANCE

Risk Perception - Income/Education

1. General
2. Residents vs tourists
3. **Demographic differences**
4. Effect on acceptability
5. Effect on pro-environmental behaviour





The **richest** and those with the **highest education** background feel **slightly less worried** about **economic decline.**

Note: Reported differences are significant at p < .001 level

Risk Perception

1. General
2. Residents vs tourists
3. Demographic differences
4. **Effect on acceptability**
5. Effect on pro-environmental behaviour

Note: Reported differences are significant at p < .001 level

Decreasing marine life

β = 0.143 → **More** acceptance of dunes

β = - 0.142 → **Less** acceptance of ports

β = - 0.265 → **Less** acceptance of tourism

As individuals perceive **decreasing marine life** as a heightened risk, their **willingness** to embrace natural **dunes slightly increases**. However, when it comes to **tourism and port** development, these individuals are **more reluctant** to support these initiatives.

Sea level rise

β = 0.205 → **More** acceptance of dunes

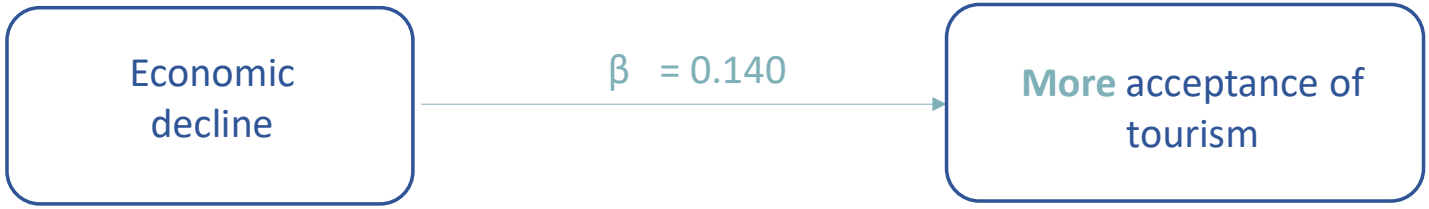
β = 0.200 → **More** acceptance of dikes

Greater perceptions of **sea level rise** as a risk are associated with an **increase in acceptance of coastal protection.**

BLUE BALANCE

Risk Perception

1. General
2. Residents vs tourists
3. Demographic differences
4. **Effect on acceptability**
5. Effect on pro-environmental behaviour



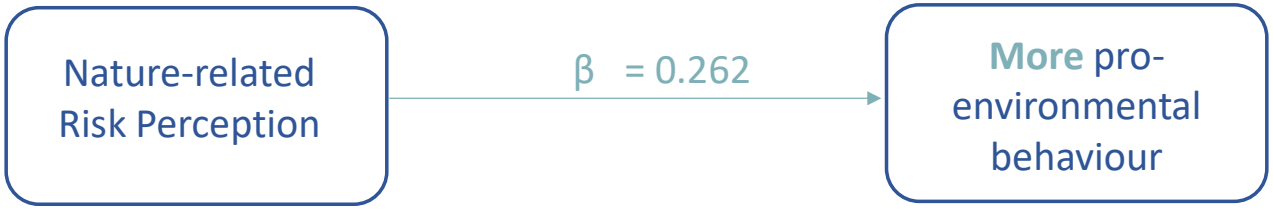
As individuals perceive an **economic decline** as a heightened risk, their **willingness** to accept the development of **tourism** in less touristic areas **slightly increases.**

Note: Reported differences are significant at p < .001 level

BLUE BALANCE

Risk Perception

1. General
2. Residents vs tourists
3. Demographic differences
4. Effect on acceptability
5. **Effect on pro-environmental behaviour**



As individuals perceive sea level rise and decreasing marine life as **greater risks**, their overall **pro-environmental actions** (related to the coast) **slightly increase.**

Note: Reported differences are significant at p < .001 level

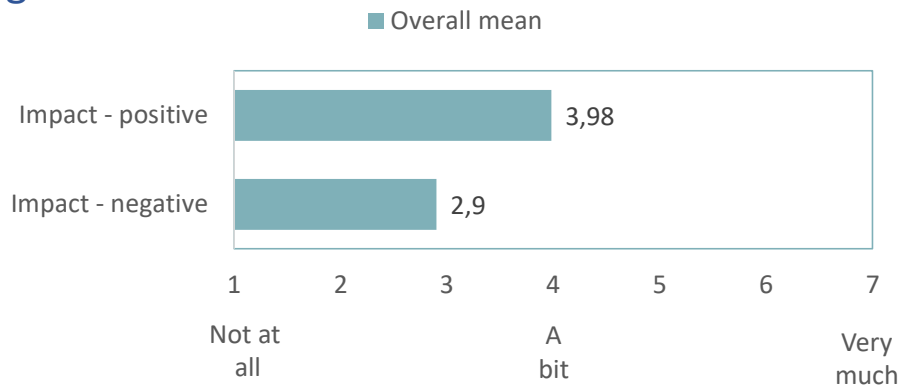
BLUE BALANCE

Impact Perception

1. General
2. Residents vs tourists
3. Demographic differences
4. Effect on acceptability

Impact perception *is an individual's assessment or beliefs regarding the potential positive outcomes (i.e. benefits) or potential negative outcomes (i.e. costs) associated with the projects.*

Overall, respondents do **not** believe the projects will have **much of an impact** on their lives (mean scores are about or under average). They also believe the projects will have **more of a positive impact** than a negative one.

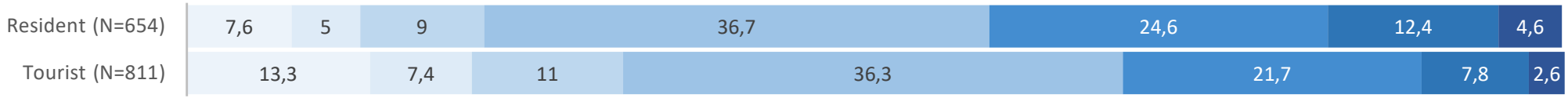


Note: Reported differences are significant at p < .001 level

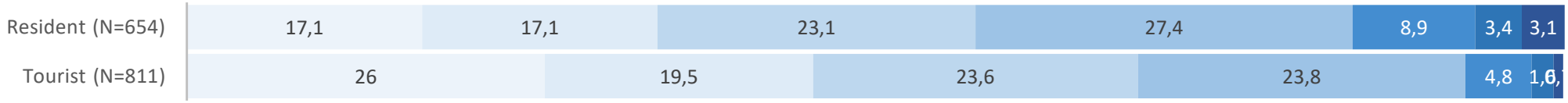
BLUE BALANCE

Impact Perception – Resident vs Tourist

*I believe the projects mentioned earlier will have an overall **positive** impact on my personal life.*



*I believe the projects mentioned earlier will have an overall **negative** impact on my personal life.*



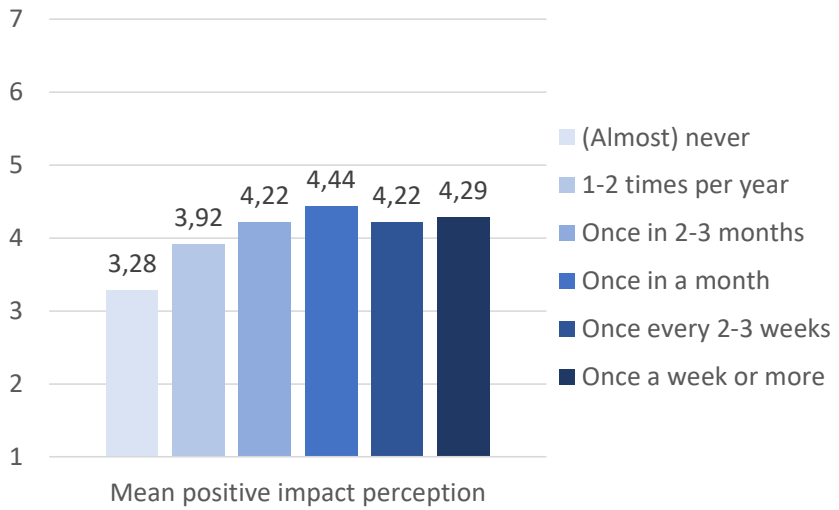
Residents are **slightly more likely** to believe that the projects will have an **impact** on their life (be it positive or negative), with:

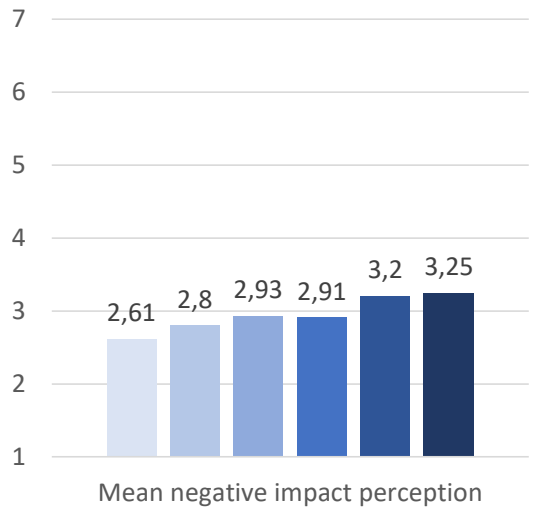
- **41,6%** of residents (vs. 32.1% of tourists) believing the projects will have a **positive** impact, and
- **15,4%** of residents (vs. 7,1% of tourists) believing the projects will a **negative** impact.

BLUE BALANCE

Impact Perception - Seaside visits

1. General
2. Residents vs tourists
3. **Demographic differences**
4. Effect on acceptability



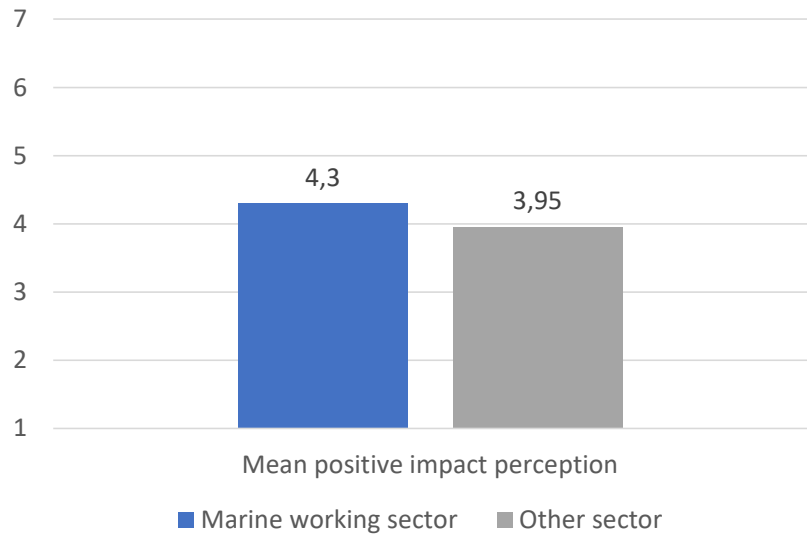


Those who **(almost) never** visit the coastline are **much less likely** to believe the projects will have a **positive** impact on their life.
Those who visit the coastline **once every 2-3 weeks** or **once a week or more** are **more likely** to believe the projects will have a **negative** impact on their life.

Note: Reported differences are significant at p < .001 level

Impact Perrception - Working sector

1. General
2. Residents vs tourists
3. **Demographic differences**
4. Effect on acceptability



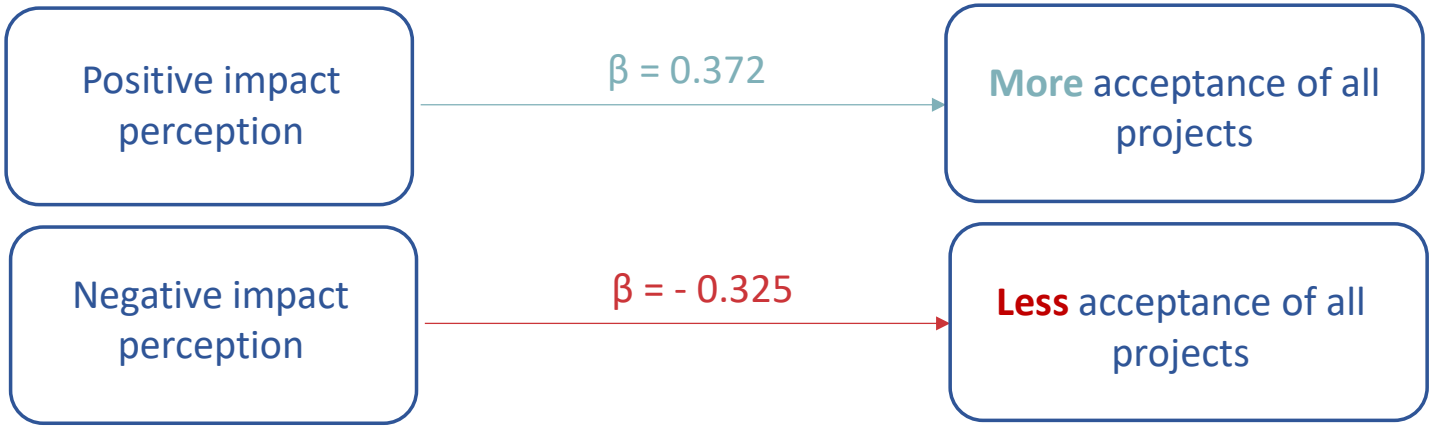
Individuals employed (or with previous experience) in the **marine sector** are **slightly more** likely to believe the projects will have a **positive** impact on their life compared to those that have never worked in this sector (p = .005).

Note: Reported differences are significant at p < .001 level (unless stated otherwise)

BLUE BALANCE

Impact Perception

1. General
2. Residents vs tourists
3. Demographic differences
4. **Effect on acceptability**



As people **increasingly** perceive a **positive impact** on their life resulting from the projects, their **acceptance** of these projects **substantially grows.**

On the contrary **with increasing levels of negative impact perception,** their **acceptance** of these projects **substantially diminishes.**

Note: Reported differences are significant at p < .001 level

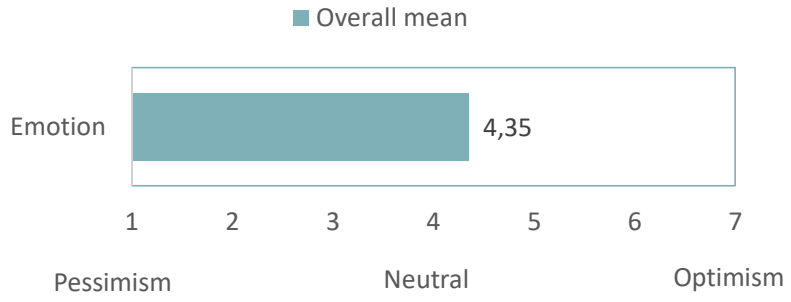
BLUE BALANCE

Emotion - Definition

1. **General**
2. Residents vs tourists
3. Demographic differences
4. Effect on acceptability

Emotions *are instinctive or intuitive feelings held by individuals. For this project, a pessimism (worry, anger, sadness…) vs. optimism (hope, excitement, interest…) spectrum was used to measure emotion.*

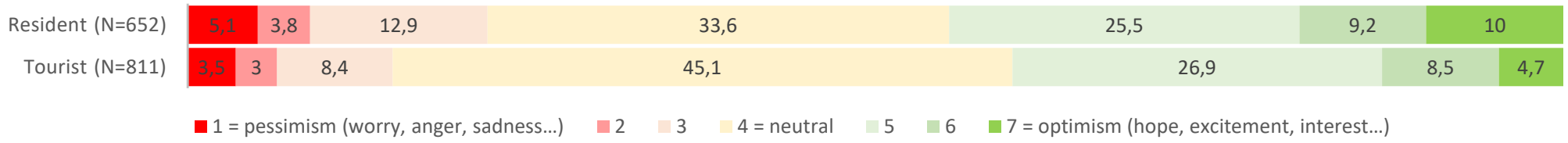
Overall people feel **pretty neutral / slightly optimistic** about the projects.



Note: Reported differences are significant at p < .001 level

Emotion – Resident vs Tourist

*What do you **feel** most when thinking of the projects mentioned earlier?*



There is **no significant difference** between residents and tourists on how the projects make them feel.

Emotion

1. General
2. Residents vs tourists
3. Demographic differences
4. **Effect on acceptability**

Optimistic emotion → β = 0.481 → **More** acceptance of all projects

As people hold **increasingly optimistic emotions** towards the projects, their **acceptance** of these projects **substantially grows.**

Note: Reported differences are significant at p < .001 level

BLUE BALANCE

Trust

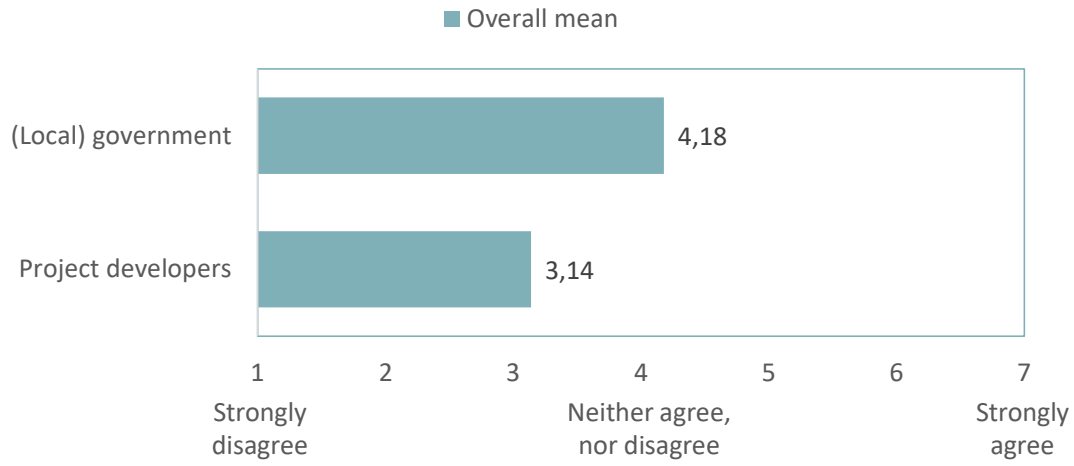
1. **General**
2. Residents vs tourists
3. Demographic differences
4. Effect on acceptability

Note: Reported differences are significant at p < .001 level

Trust *is a concept that is often used in the context of public support for climate policies, as it represents an essential predictor in policy and project acceptance. For this survey, only the trust in project developers and the (local) government was questioned.*

Kitt et al., 2021

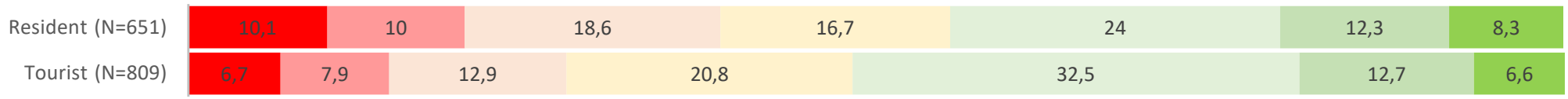
Overall, trust levels are **relatively low**. Respondents generally **trust (local) governments more than project developers**.



BLUE BALANCE

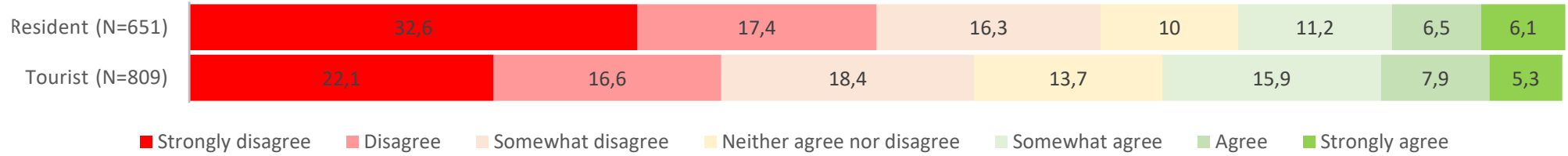
Trust – Resident vs Tourist

*I trust **(local) government** will make the right decisions that protect the interests of coastal residents.*



Residents trust (local) governments **slightly less** than tourists do, with **38,7% of residents** (vs. 27,5% of tourists) stating they **do not trust (local) governments** (p = .004)**.**

*I trust **project developers** take the interests of coastal residents into account and do not only prioritise their own interests.*



Residents trust project developers **slightly less** than tourists do, with **66,3% of residents** (vs. 57,1% of tourists) stating they do **not trust project developers.**

Trust - Seaside visits

1. General
2. Residents vs tourists
3. **Demographic differences**
4. Effect on acceptability

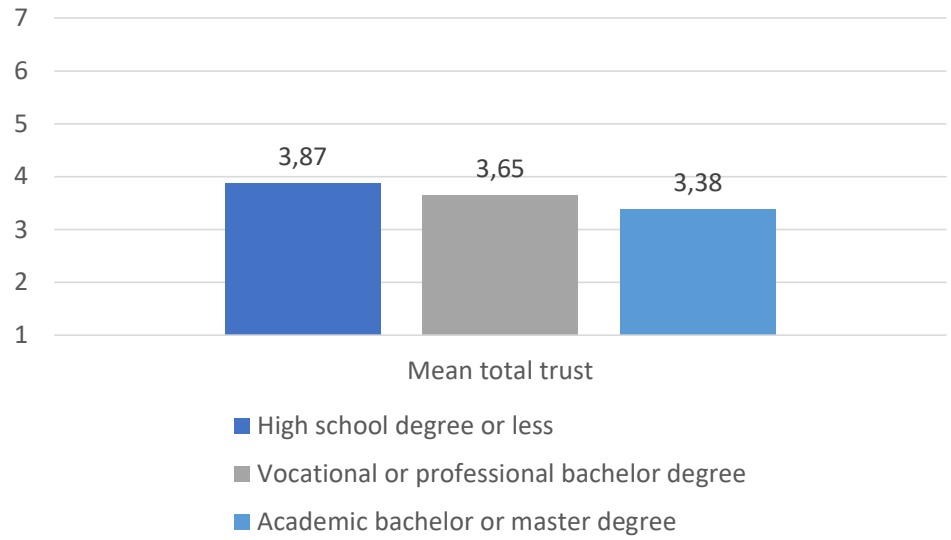
Those who visit the coastline **once a week or more trust project developers slightly less** than people who visit the coast once in 2-3 months or less.

Note: Reported differences are significant at p < .001 level

BLUE BALANCE

Trust - Education

1. General
2. Residents vs tourists
3. **Demographic differences**
4. Effect on acceptability



Those with the **highest education background trust** project developers and government **slightly less.**

Note: Reported differences are significant at p < .001 level

Trust

1. General
2. Residents vs tourists
3. Demographic differences
4. **Effect on acceptability**

Note: Reported differences are significant at p < .001 level

Trust in project developers → β = 0.306 → **More** acceptance of the development of aqua-culture/ports/tourism

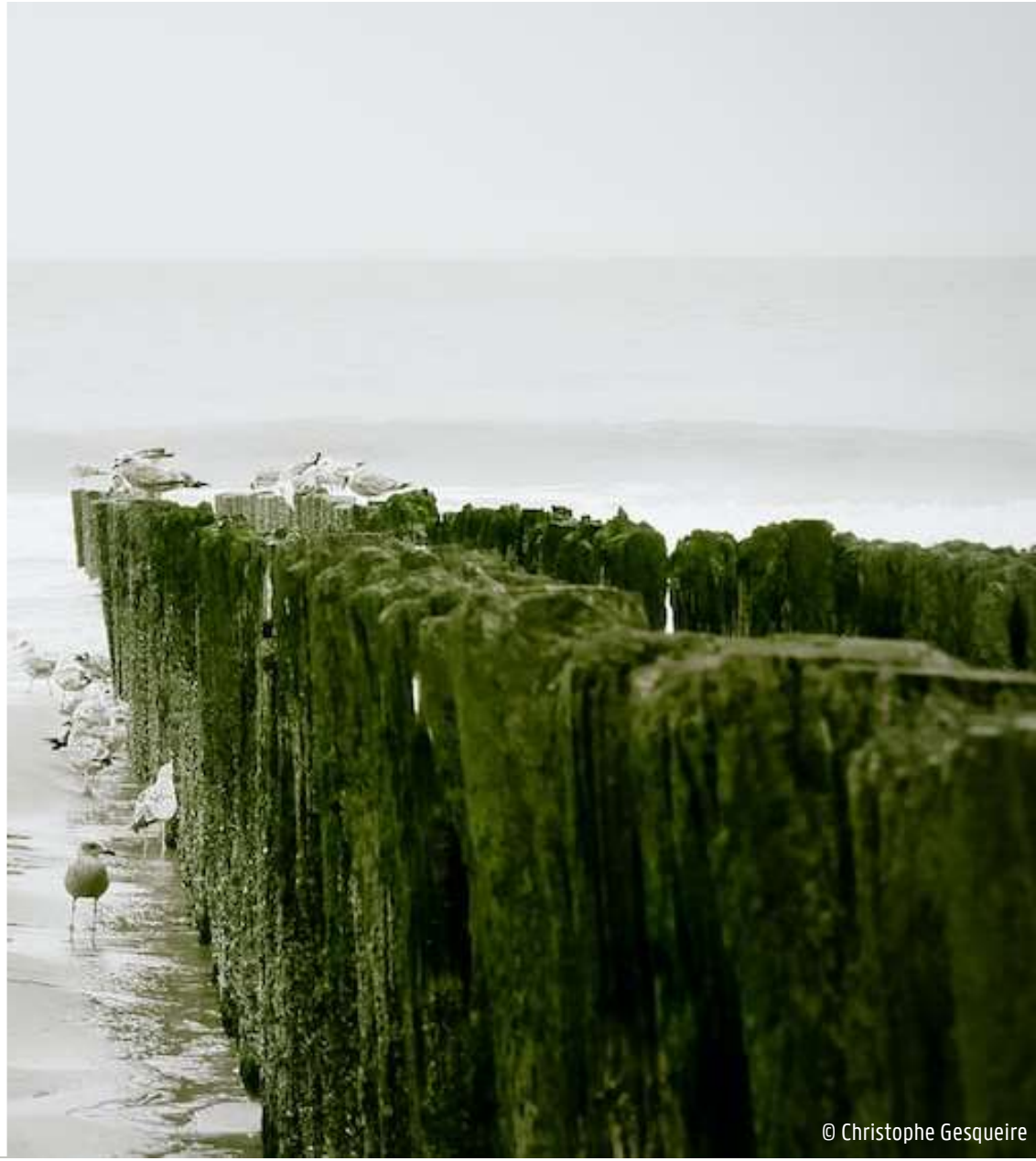
The **more** an individual **trusts project developers** the **more likely** they are to **accept** the **development of projects**, such as ports, aquaculture and tourism.

Trust in (local) government → β = 0.313 → **More** acceptance of **all** projects

The **more** an individual **trusts (local) governments**, the **more likely** they are to **accept all** of the proposed **projects.** This includes the development of projects (ports/aquaculture/tourism) and coastal protection.

Section 1 – Survey

Part III – Conclusions



Sustainable Coastal Development & Influencing Factors

Demographics

General:
- Age
- Gender
- Education
- Income

Related to the coast:
- Resident vs. tourist
- Number of visits
- Working sector

Internal variables

Personal Norm

Place attachment

Risk perception

External variables

Impact perception

Emotion toward projects

Trust

Influencing factors

Acceptability of blue transition projects

Pro-environmental behaviour at the coast

Key take aways – demographics

Higher Familiarity with the Belgian Coast

- Coastal Resident
- Frequent Visitor of the Seaside
- Experience in the Marine Sector

leads to

More Acceptance of natural dunes

Less Acceptance of tourism

More Pro-environmental Behaviour at the Coast

Key take aways – demographics

Higher Familiarity with the Belgian Coast

- Coastal Resident
- Frequent Visitor of the Seaside
- Experience in the Marine Sector

leads to

Internal variables

Higher
Personal Norm, Place Attachment and Nature-related risk perception

External variables

Higher
Impact Perception

Lower Trust in Project Developers

Key take aways – demographics

Coastal Resident

Frequent Visitor of the Seaside

≠

Experience in the Marine Sector

leads to

But some differences are noted between coastal residents and frequent visitor of the seaside vs. having experience in the marine sector

→ *Possible reasons: Knowledge, belief in technologies, being a project developer themselves, direct involvement in projects, etc.*

Higher Nature-related Risk Perception

Higher positive / Higher negative Impact Perception

Lower Trust in Project Developers

Higher decreasing marine life Risk Perception

Higher positive Impact Perception

Influencing Factors on the Acceptance of Natural Dunes

Internal variables

Higher Personal Norm — b = 0.074**

Place attachment
- **Higher Place identity** — b = 0.147***
- **Lower Place dependence** — b = - 0.118**

Risk perception
- **Higher risk of marine life** — b = 0.120***
- **Higher risk of sea level rise** — b = 0.140***
- Lower risk of economic decline — b = - 0.053*

External variables

Impact perception
- **More Positive** — b = 0.120***
- Less Negative — b = - 0.094***

Emotion towards projects
- **More optimistic** — b = 0.114***

Trust
- **Less trust in project developers** — b = - 0.179***
- Government — b = 0.054 (ns)

Higher Acceptability of natural dunes

Model explains 17.08% of the total variance of the acceptance of natural dunes (Adjusted R^2 = 0.171, F(11,1448) < .001)

- *Focusing on the nature-related risks and emphasizing place identity can help increase acceptance*
- *High place dependence is an issue -> potentially due to perceived loss of space for own or other human activities?*
- *Positive impact perceptions and feeling optimistic also help*
- *Less trust in project developers leads to more acceptance -> potentially due to perceived discrepancy between 'profit motivated developers' and 'nature-oriented project', especially for environmentally-minded people?*

Note. * p < .05, ** p < .01, *** p < .001

Influencing Factors on the Acceptance of Dikes

Internal variables

Lower Personal Norm — b = - 0.064*

Place attachment — b = 0.032 (ns)
- Place identity — b = - 0.000 (ns)
- Place dependence

Risk perception — b = 0.002 (ns)
- Marine life decreasing
- **Higher risk of sea level rise** — b = 0.135***
- Higher risk of economic decline — b = 0.054*

External variables

Impact perception — b = 0.171***
- **More Positive**
- **Less Negative** — b = - 0.131***

Emotion towards projects — b = 0.186***
- **More optimistic**

Trust — b = 0.008 (ns)
- Project developers
- More trust in Government — b = 0.084**

Higher Acceptability of dikes

Model explains 19.67% of the total variance of the acceptance of dikes (Adjusted R^2 = 0.197, F(11,1448) < .001)

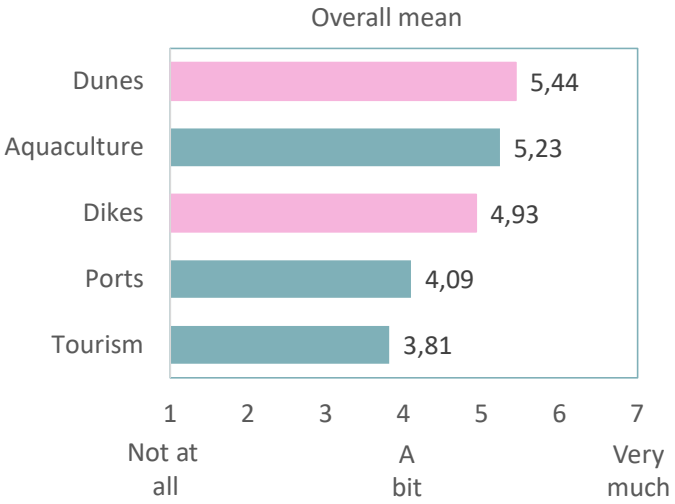
- *Focus on the risk of sea level rise can help increase acceptance*
- *Positive impact perceptions and feeling optimistic also help*

Note. * p < .05, ** p < .01, *** p < .001

Key take aways for coastal protection (dunes & dikes)

*I accept expanding and heightening **natural dunes** (up to 4m) in my local area/the places I like to visit at the Belgian coast.*

*I accept building new sea **dikes** and heightening existing ones in my local area/the places I like to visit at the Belgian coast.*



- Dunes are more accepted than dikes, maybe due to wider perceived (environmental) benefits.
- Generally accepted and even more so by individuals who have familiarity with the Belgian coast (i.e. residents, frequent visitors and people who have worked in the marine sector).
- An overall clear understanding of the need to protect the coastal region against sea level rise (even more for people with high risk perceptions and a high place identity to the Belgian coast).
- **But** the acceptability of any specific (coastal protection) project is likely to decrease if people perceive that it will negatively affect their lives.

Key take aways – Communication strategy for coastal protection

- Emphasise sea level rise risks and the potential positive impact of these projects
  - **Local residents:** protecting both property and lives along the coast
  - BUT consider also the **tourists** (acceptance for dunes was a bit higher for residents): how will they also benefit from coastal protection measures?
- Dunes > Dikes: demonstrate how coastal protection can benefit nature, e.g. the more recent, creative designs

BLUE BALANCE

Influencing Factors on the Acceptability of Aquaculture

Internal variables

Personal Norm — b = - 0.028 (ns)

Place attachment — b = 0.081*
- Higher Place identity
- Lower Place dependence — b = - 0.089*

Risk perception — b = - 0.029 (ns)
- Marine life decreasing — b = 0.060*
- Higher risk of sea level rise
- Economic decline — b = 0.027 (ns)

External variables

Impact perception — b = 0.058 (ns)
- Positive — b = - 0.110***
- **Less Negative**

Emotion towards projects — b = 0.232***
- **More optimistic**

Trust — b = - 0.008 (ns)
- Project developers — b = 00.031 (ns)
- Government

More Acceptability of aquaculture

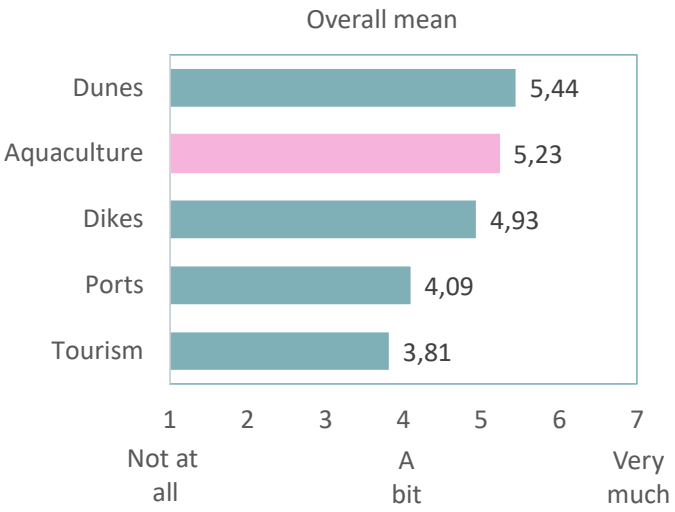
Model explains 11.51% of the total variance of the acceptance of natural dunes (Adjusted R^2 = 0.115, F(11,1448) < .001)

- *Few variables influencing acceptance of aquaculture*
- *Feeling more optimistic about the projects and thinking that the negative impacts are low, help*

Note. * p < .05, ** p < .01, *** p < .001

Key take aways for Aquaculture

I accept farming of mussels, oysters, seaweed in the North Sea (i.e. ***aquaculture****).*



- Generally accepted
- No significant differences between tourist and residents on the acceptance of aquaculture
- Only (negative) impact perception and emotion have a relatively strong role in predicting acceptance.
- **As aquaculture projects are new along the Belgian coast, the lack of other significantly strong predictors may suggest a lack of general awareness and knowledge about aquaculture.** Hence people may have less formalised views regarding aquaculture.

Key take aways – Communication strategy for aquaculture

- Educate the public (both residents and tourists) on aquaculture projects along the Belgian coast
  - Make aquaculture part of the Belgian coast identity
  - Strengthen the already positive beliefs about aquaculture for the long term
  - Highlight the co-benefits of aquaculture, with a special focus on:
    - Co-existence with other activities for those people who might perceive aquaculture as a barrier to their own activities or to human activities in general (i.e. those with a higher place dependence)

BLUE BALANCE

Influencing Factors on the Acceptability of Ports

Internal variables

Personal Norm — b = - 0.040 (ns)

Place attachment
- Place identity — b = -0.032 (ns)
- Lower Place dependence — b = - 0.077*

Risk perception
- Marine life decreasing — b = -0.052 (ns)
- Sea level rise — b = -0.018 (ns)
- Higher Risk of Economic decline — b = 0.052*

External variables

Impact perception
- **More Positive** — b = 0.169***
- **Less Negative** — b = - 0.150***

Emotion towards projects
- **More optimistic** — b = 0.217***

Trust
- More trust in Project developers — b = 0.063*
- More trust in Government — b = 0.087**

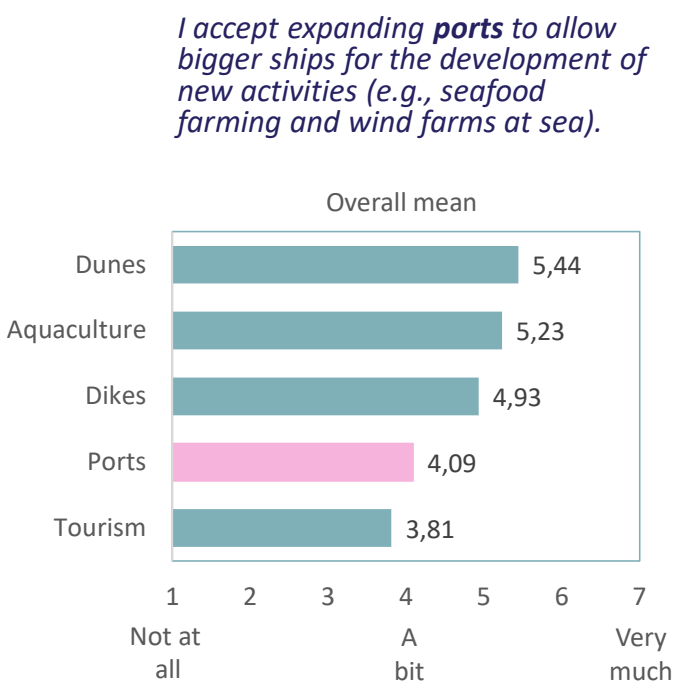
More Acceptability of ports

Model explains 21.42% of the total variance of the acceptance of the further development of the ports (Adjusted R^2 = 0.214, F(11,1448) < .001)

- *Positive impact perceptions and feeling optimistic help*

Note. * p < .05, ** p < .01, *** p < .001

Key take aways for the Expansion of Ports



- Not well accepted.
- Only impact perception and emotion have a relatively strong role in predicting acceptance of ports.
- Overall ports seem to be perceived as important to the coastal economy, but the acceptability of any specific port expansion will depend on whether people perceive that it will negatively affect their lives. This perception will further depend on how the activities for which the port expansion is required are perceived.

BLUE BALANCE

Key take aways – Communication strategy for ports

- Focus communication efforts to the communities neighbouring ports that would be directly affected by any port expansion
- Properly explain the reason for port expansion and consider how it might be perceived by different people:
  - For people with a high coastal and/or environmental identity, demonstrate wider beneficial effects on local communities and on the environment (or at least how any negative impacts have been minimised).
  - People with a high place dependence, who love the coast for its activities and the instrumental benefits, are possibly worried that the ports will take even more place. Therefore it is important to highlight how other activities will be affected, or if there is a possibility for multi-use.

BLUE BALANCE

Influencing Factors on the Acceptability of Tourism

Internal variables

Lower Personal Norm — b = - 0.108***

Place attachment
- **Lower Place identity** — b = - 0.105**
- **Higher Place dependence** — b = 0.134***

Risk perception
- **Lower risk of Marine life** — b = - 0.150***
- Sea level rise — b = 0.019 (ns)
- **Higher Risk of Economic decline** — b = 0.114***

External variables

Impact perception
- **More Positive** — b = 0.186***
- Less Negative — b = - 0.087***

Emotion towards projects
- More optimistic — b = 0.058 (ns)

Trust
- **More trust in Project Developers** — b = 0.146***
- **More trust in Government** — b = 0.153***

More Acceptability of tourism

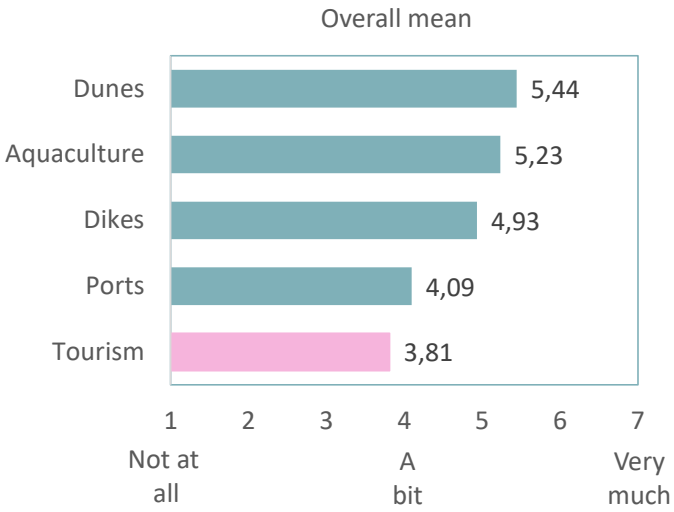
Model explains 24.09% of the total variance of the acceptance of the further development of the ports (Adjusted R^2 = 0.241, F(11,1448) < .001)

- *People with a high personal norm and place identity related to the coast, and who are worried about decreasing marine life, will not be happy with more tourism*
- *People with a high place dependence and who are worried about economic decline are fine with more tourism → tourism seems to be perceived as crucial to the coastal economy*
- *Trust in project developers and government also leads to more acceptance -> maybe because they are perceived as key enablers of this economic growth*
- *More positive impact perceptions and less negative impact perceptions can help*

Note. * p < .05, ** p < .01, *** p < .001

Key take aways for promoting sustainable tourism

*I accept promoting and developing **tourism** in less touristic areas of the Belgian coast.*



- Limited acceptance, especially by individuals who have familiarity with the Belgian coast (and high place identity) (i.e. residents, frequent visitors and people who have worked in the marine sector).
- Tourism is perceived as important for a thriving coastal economy (as evidenced by the strong role of place dependence and economic decline risk perception in predicting acceptance).
- **But development of tourism is associated with negative (local and environmental) impacts**.

Key take aways – Communication strategy for sustainable tourism

- Focus communication efforts on residents and environmentally-minded people and consider matters important to them:
  - Minimal to beneficial environmental impact
  - Minimal to beneficial impacts on the local communities
- Need to change the image/perception of tourism?

BLUE BALANCE

Influencing Factors on Pro-Environmental behaviour

Internal variables

Higher Personal Norm — b = 0.355***

Place attachment
- **Higher Place identity** — b = 0.155***
- Place dependence — b = 0.019 (ns)

Risk perception
- More risk of Marine life — b = 0.072**
- More risk of Sea level rise — b = 0.063*
- Economic decline — b = -0.021 (ns)

External variables

Impact perception
- Positive
- Negative

Emotion towards projects
- Optimism

Trust
- Project developers
- Government

Conceptual thinking: these variables were designed to predict acceptability, not pro-environmental behaviour
Based on the analysis: not a good fit for the model

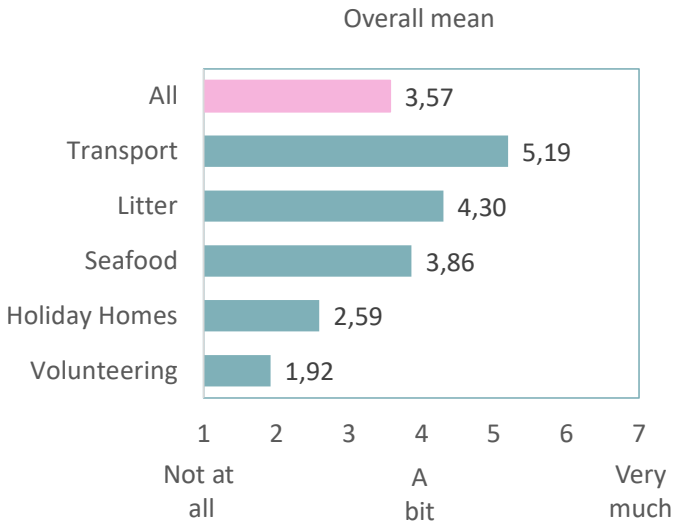
Pro-environmental behaviour at the coast

Model explains 24.8% of the total variance of pro-environmental behaviour (Adjusted R^2 = 0.248, F(6,1453) < .001)

Note. * p < .05, ** p < .01, *** p < .001

Key take aways – Pro-environmental behaviour

Overall respondents **do not report acting much in a pro-environmental way** related to coastal behaviours.



- The more environmentally-minded people (high personal norm and high nature-related risk perception) are more likely to act in a pro-environmental way.
- Likewise, those who feel a strong connection to the Belgian coast (high personal norm and high place identity) are more willing to protect it and thus are more likely to act in a pro-environmental way.

→ **This pattern is reflected in the acceptance of natural dunes.**

BLUE BALANCE

Overall conclusion

- There are differences between those who feel familiar with the coast (residents/frequent visitors/people in the marine working sector…) vs. others
- Overall, risk perceptions and positive beliefs about the project are the most important factors for acceptability
- Necessary to differentiate the communication strategies depending on the type of coastal development project → different motivations for acceptance: strong coastal and/or environmental identity vs. more economic oriented

				
• Positive beliefs about the project • Sea level rise and loss of marine life risk perception • Place identity • Low trust	• Positive beliefs about the project • Sea level rise risk perception	• Positive beliefs about the project	• Positive beliefs about the project • Economic decline risk perception	• Positive beliefs about the project • Economic decline risk perception • Place dependence • High trust

People with a strong coastal and/or environmental identity

More economic oriented people

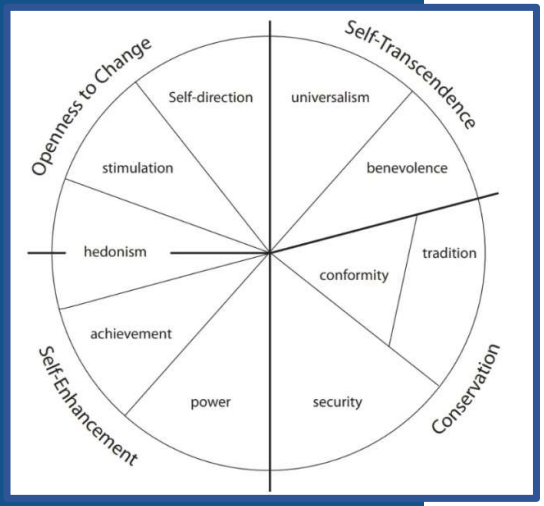
BLUE BALANCE

Appendix 1

Survey responses on the rest of the variables

Definition

- **Personal values**
- **Group values**
- Personal marine value orientations
- Group marine value orientations
- Climax thinking



Values are stable, deep-rooted principles, ideals or goals held by individuals that guide an individual's thoughts, preferences and behaviour.

Steg, 2016 and Bouman et al., 2018

There are 10 basic human values categorised along two dimensions:

1. ***Self-enhancement vs. self-transcendence:***
   - ***Self-enhancement** = the pursuit of one's own interest and success and dominance over others.*
   - ***Self-transcendence** = concern for the welfare and interests of others and of the environment.*
2. ***Openness to change vs. conservation:***
   - ***Openness to change** = freedom of thought and action and readiness for change.*
   - ***Conservation** = order, self-restriction, preservation of the past and resistance to change.*

Schwartz, 1992 and 2012

BLUE BALANCE

Definition

- **Personal values**
- **Group values**
- Personal marine value orientations
- Group marine value orientations
- Climax thinking

Four types of values along the self-transcendence vs. self-enhancement dimension have proven to be particularly relevant in predicting pro-environmental behaviour and policy support:

- ***Biospherism*** *= valuing the environment and non-human species*
- ***Altruism*** *= valuing other human beings*
- ***Hedonism*** *= valuing pleasure and comfort*
- ***Egoism*** *= valuing personal resources*

Stern et al., 1998; De Groot and Steg, 2008 and Steg et al., 2014

BLUE BALANCE

Definition

- **Personal values**
- **Group values**
- Personal marine value orientations
- Group marine value orientations
- Climax thinking

Personal values

= how people think about their **own values**

"It's important to me…"

Group values

= how people think about/perceive **other people's values**

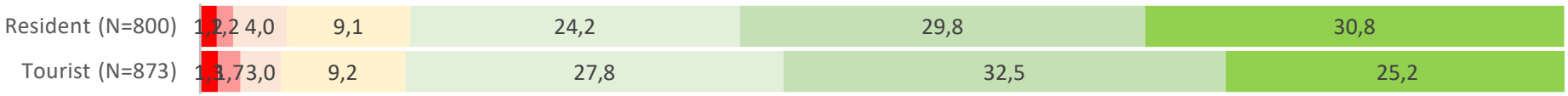
"It's important to the average Belgian coastal resident/tourist…"

Bouman et al., 2020

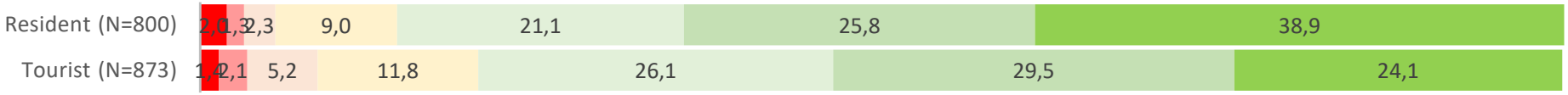
BLUE BALANCE

Personal Values

It's important to me to help the people around me…
It's important to me to be loyal to my friends…



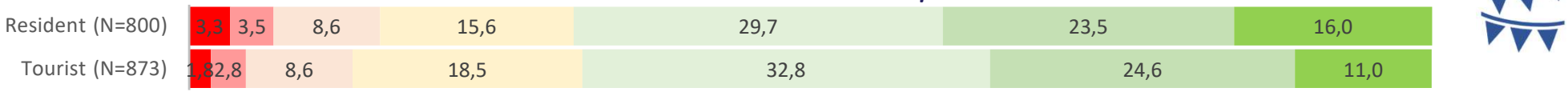
It's important to me to respect nature…
It's important to me to look after the environment…



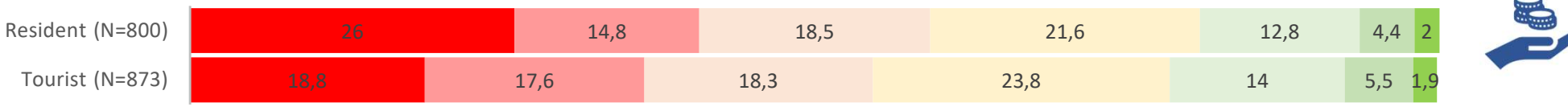
Self-transcendence

Self-enhancement

It's important to me to have a good time…
It's important to me to do things that give me pleasure…



It's important to me to be rich…



1 - Not important to me at all | 2 | 3 | 4 - Neither important, nor not important to me | 5 | 6 | 7 - Very important to me

BLUE BALANCE

Personal Values

It's important to me to have a good time…
It's important to me to do things that give me pleasure…

Resident (N=800)	3,3	3,5	8,6	15,6	29,7	23,5	16,0
Tourist (N=873)	1,8	2,8	8,6	18,5	32,8	24,6	11,0

It's important to me to do lots of different things in life…

Resident (N=800)	3,1	4,5	12,6	18,9	26,5	18	16,4
Tourist (N=873)	5,2	7,8	16,2	21,1	24,5	16,5	8,8

Openness to change

Conservation

It's important to me to uphold tradition…

Resident (N=800)	7,9	7,5	12	18,9	23,1	18,3	12,4
Tourist (N=873)	6,3	6,5	14,8	18,2	24,3	19,2	10,7

It's important to me that government ensures people's safety against all threats…
It's important to me to live in secure surroundings…

Resident (N=800)	4,0	5,4	9,0	16,0	25,1	22,5	18,4
Tourist (N=873)	2,3	3,5	7,9	18,7	28,7	25,6	13,6

1 - Not important to me at all | 2 | 3 | 4 - Neither important, nor not important to me | 5 | 6 | 7 - Very important to me

BLUE BALANCE

Group Values

It's important to the average Belgian coastal resident/tourist to help the people around them…
It's important to the average Belgian coastal resident/tourist to be loyal to their friends…

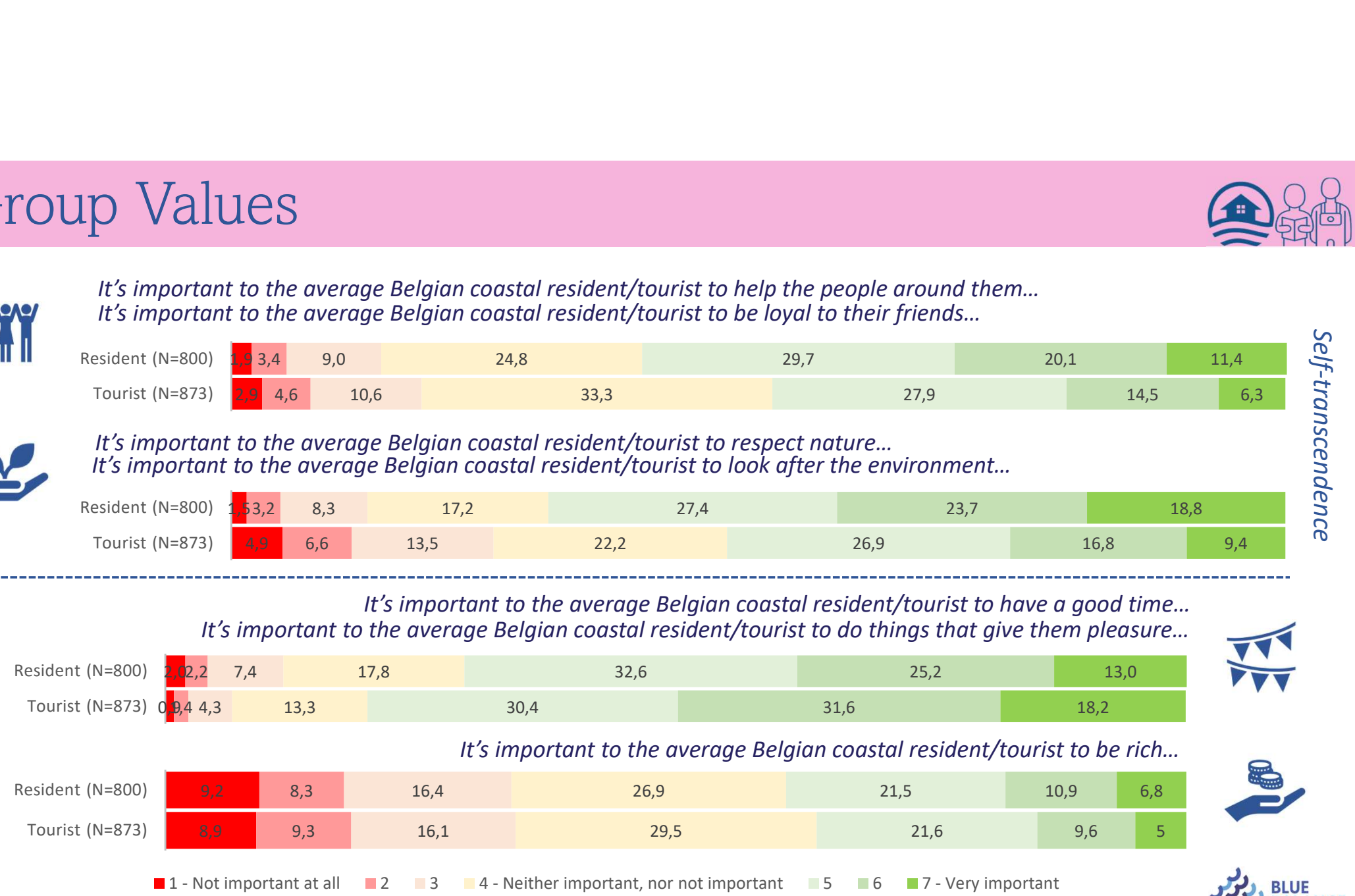
It's important to the average Belgian coastal resident/tourist to respect nature…
It's important to the average Belgian coastal resident/tourist to look after the environment…

Self-transcendence

Self-enhancement

It's important to the average Belgian coastal resident/tourist to have a good time…
It's important to the average Belgian coastal resident/tourist to do things that give them pleasure…

It's important to the average Belgian coastal resident/tourist to be rich…



BLUE BALANCE

Group Values

It's important to the average Belgian coastal resident/tourist to have a good time…
It's important to the average Belgian coastal resident/tourist to do things that give me pleasure…

Resident (N=800)	1,9	3,4	9,0	24,8	29,7	20,1	11,4
Tourist (N=873)	2,9	4,6	10,6	33,3	27,9	14,5	6,3

NEW!

It's important to the average Belgian coastal resident/tourist to do lots of different things in life…

Resident (N=800)	2,5	6	15,8	30,7	25,9	12,8	6,4
Tourist (N=873)	4,4	7,2	15	23,3	30,1	15	5

Openness to change

Conservation

It's important to the average Belgian coastal resident/tourist to uphold tradition…

Resident (N=800)	2,9	5,7	10,8	22,7	27,8	19	11,2
Tourist (N=873)	4	5,8	10,9	28	29	14,6	7,6

It's important to the average Belgian coastal resident/tourist that government ensures people's safety against all threats…
It's important to the average Belgian coastal resident/tourist to live in secure surroundings…

Resident (N=800)	1,8	3,9	8,0	21,5	27,0	22,1	16,0
Tourist (N=873)	2,8	3,0	9,8	26,2	29,9	19,6	8,9

1 - Not important at all | 2 | 3 | 4 - Neither important, nor not important | 5 | 6 | 7 - Very important

BLUE BALANCE

Definition

- Personal values
- Group values
- **Personal marine value orientations**
- **Group marine value orientations**
- Climax thinking

*= **Marine value orientations** are one's core beliefs about the sea. According to the cognitive hierarchy, they give more direction to people's values. People can have multiple orientations and can prioritise one, depending on the context.*

1. ***Intrinsic:** the inherent worth of the ocean, independent of humans*
2. ***Instrumental**: defines the ocean as a resource for humans*
3. ***Relational:** reflects the reciprocal relationship between humans and the sea*
   - ***Nature oriented**: sense of connectedness between sea/marine life and humans*
   - ***Human oriented**: sense of community because of the marine environment*

Chan et al., 2016; Engel et al., 2020

BLUE BALANCE

Definition

- Personal values
- Group values
- **Personal marine value orientations**
- **Group marine value orientations**
- Climax thinking

Personal marine value orientations

= how people think about their **own values of the sea**

"It's important to me…"

Group marine value orientations

= how people think about/perceive **other people's values of the sea**

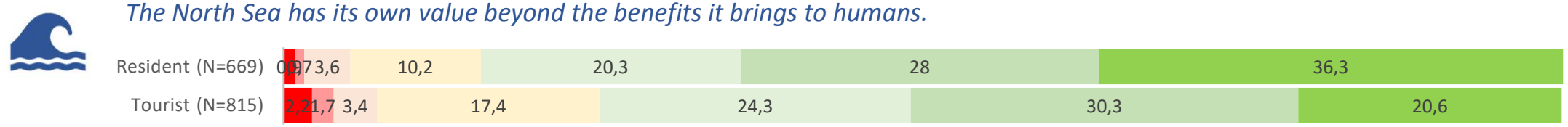
"It's important to the average Belgian coastal resident/tourist…"

Bouman et al., 2020; Chan et al., 2016; Engel et al., 2020

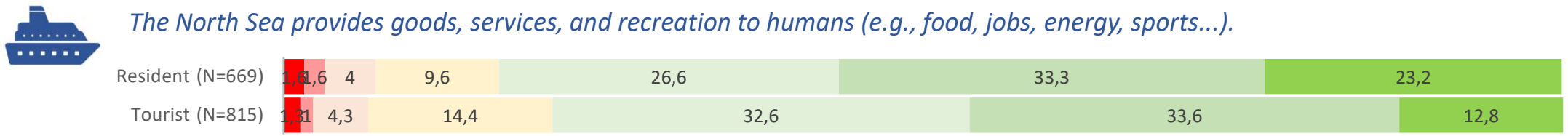
BLUE BALANCE

Personal Marine Value Orientations

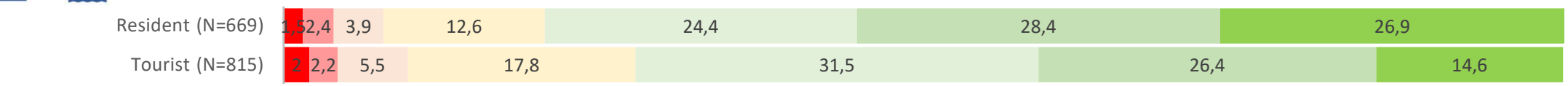
The North Sea has its own value beyond the benefits it brings to humans.



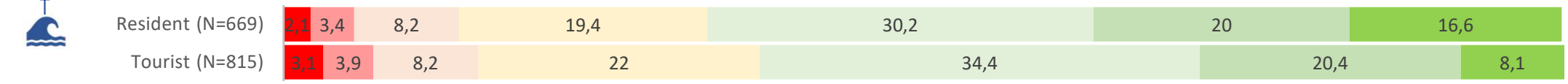
The North Sea provides goods, services, and recreation to humans (e.g., food, jobs, energy, sports...).



The North Sea people and nature together, creating a sense of connectedness with the sea and marine life.



The North Sea brings people together and creates a sense of community.

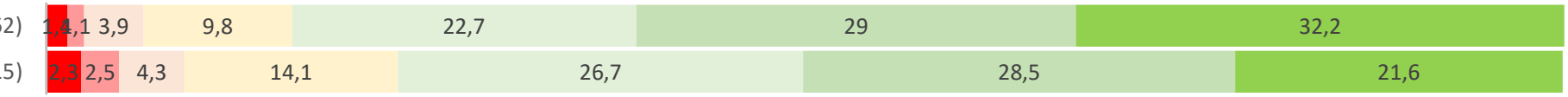


1 - Not important to me at all | 2 | 3 | 4 - Neither important, nor not important to me | 5 | 6 | 7 - Very important to me

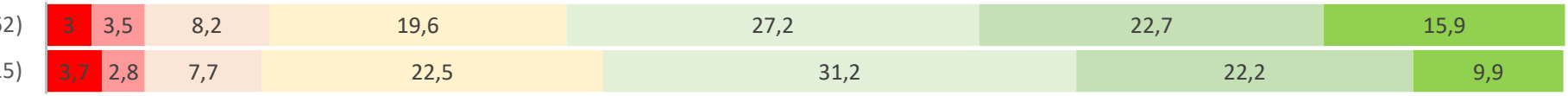
BLUE BALANCE

Group Marine Value Orientations

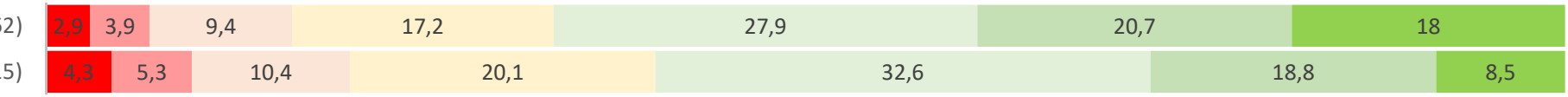
The North Sea provides goods, services, and recreation to humans (e.g., food, jobs, energy, sports...).



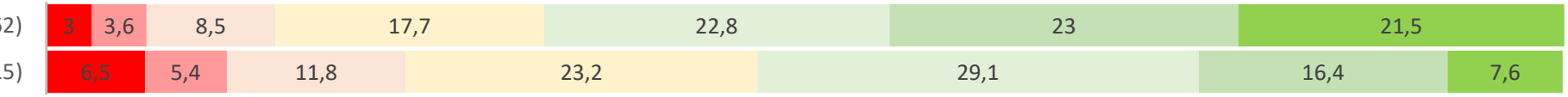
The North Sea brings people together and creates a sense of community.



The North Sea people and nature together, creating a sense of connectedness with the sea and marine life.



The North Sea has its own value beyond the benefits it brings to humans.



1 - Not important at all | 2 | 3 | 4 - Neither important, nor not important | 5 | 6 | 7 - very important

BLUE BALANCE

Definition

- Personal values
- Group values
- Personal marine value orientations
- Group marine value orientations
- **Climax thinking**

Climax thinking *suggests communities oppose projects in their locality because individuals regard their current landscapes as ideal and should therefore remain as they are.*

Sherren, 2021

Here we measure climax thinking by focussing on people's perceptions of place through time i.e. in the past, present, and future.

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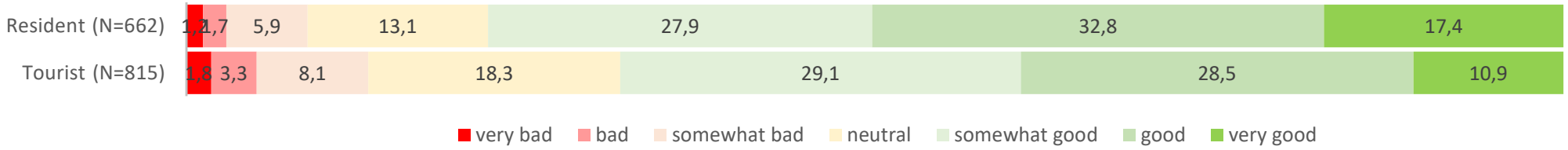
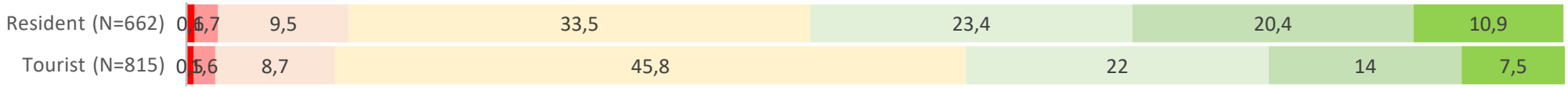
Climax Thinking

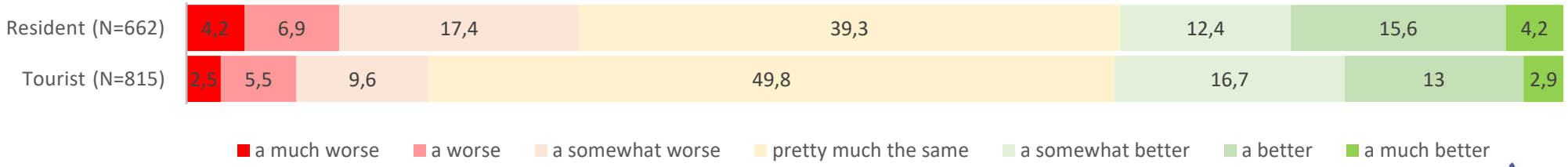
***At present**, the Belgian coast is a [very bad to very good] place to [live in/visit].*



***In the past**, the Belgian coast was [a much worse to a much better] place to [live in/visit].*



***In the future**, the Belgian coast will be [a much worse to a much better] place to [live in/visit].*



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