



How relocation in the face of coastal risks shapes senses of place and vulnerabilities? The case of a coastal community in Saint-Louis, Senegal.

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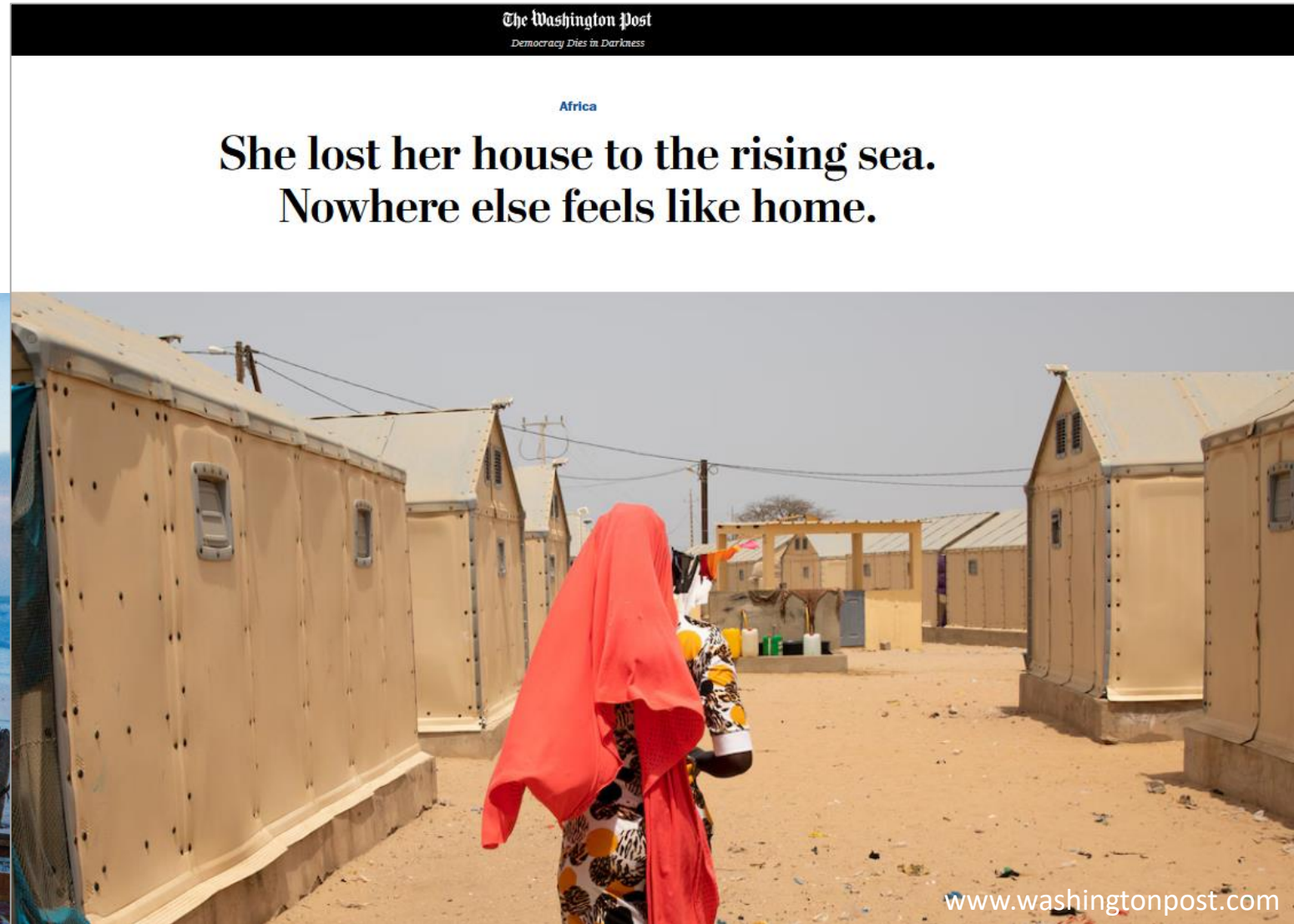
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Facing global changes along coastlines

Demographic pressure,
urbanization, climate change

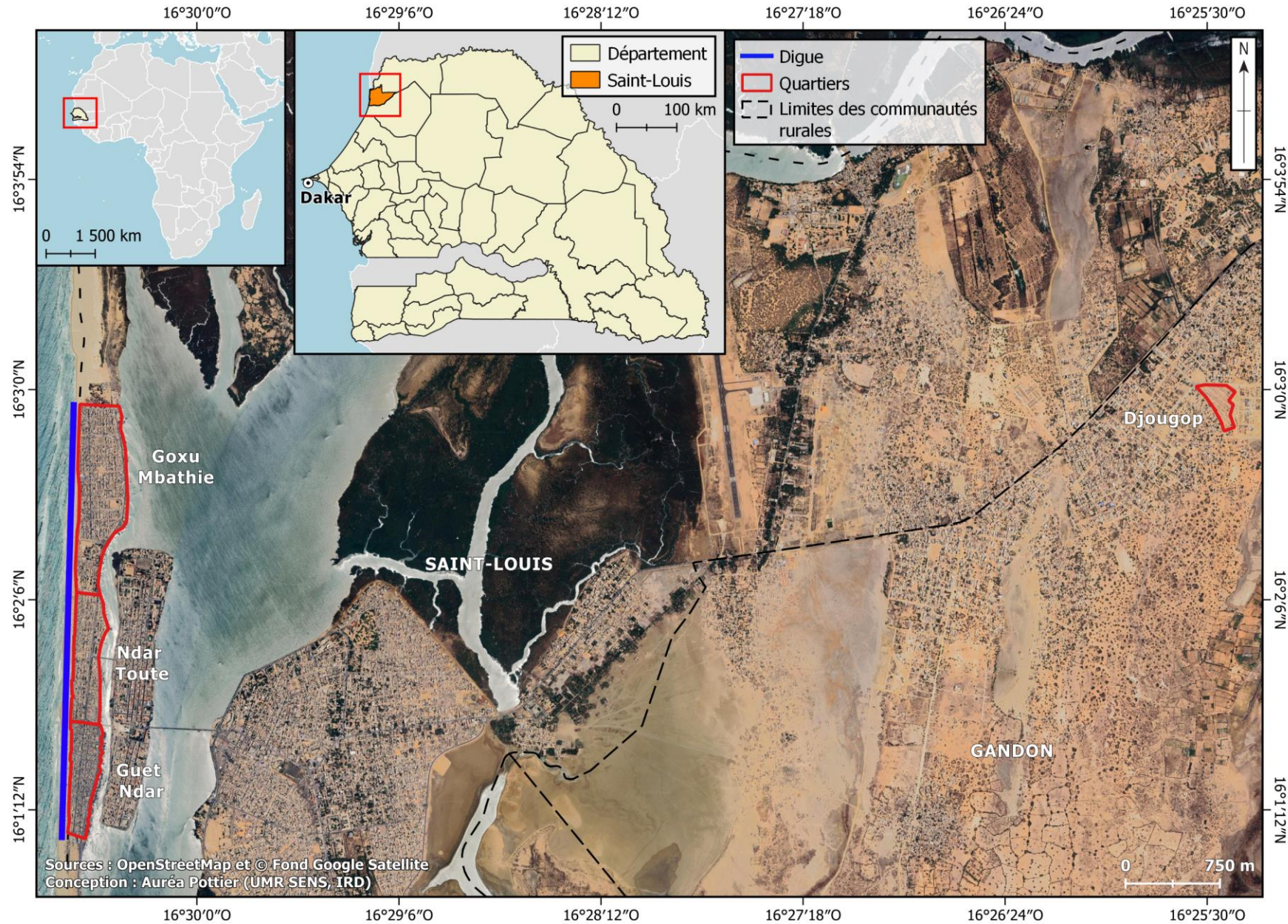
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Coastal risks



>> Relocation of « climate refugees »

Case study: Saint-Louis, Sénégal



LDB – Langue de Barbarie



Djougop



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SERRP

Projet de relèvement d'urgence et de résilience de Saint-Louis

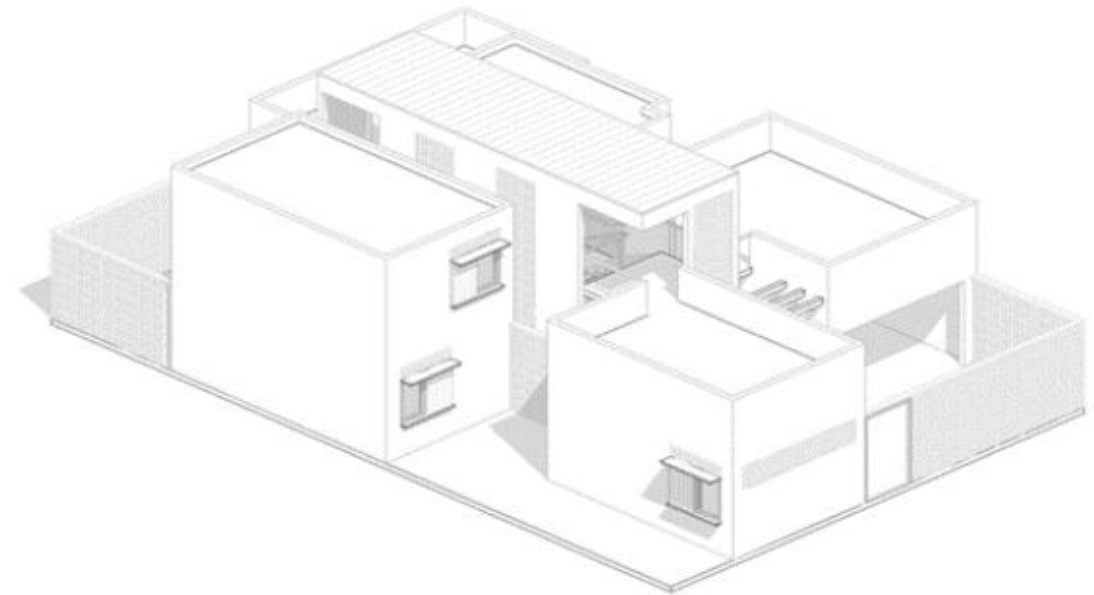


Figure 1 : modèle de logement standard

Research question : what are the psychosocial impacts of the relocation process? Dynamic of well-being and senses of place?



Methods

- **Semi-quantitative survey** >> 80 + 80 respondents

Quantitative + open-ended questions

- **Background information:** gender, age, marital status, education, length of residence
- **Main variables:** place attachment, well-being, risk perception, adaptation policies

Main characteristics of the community :

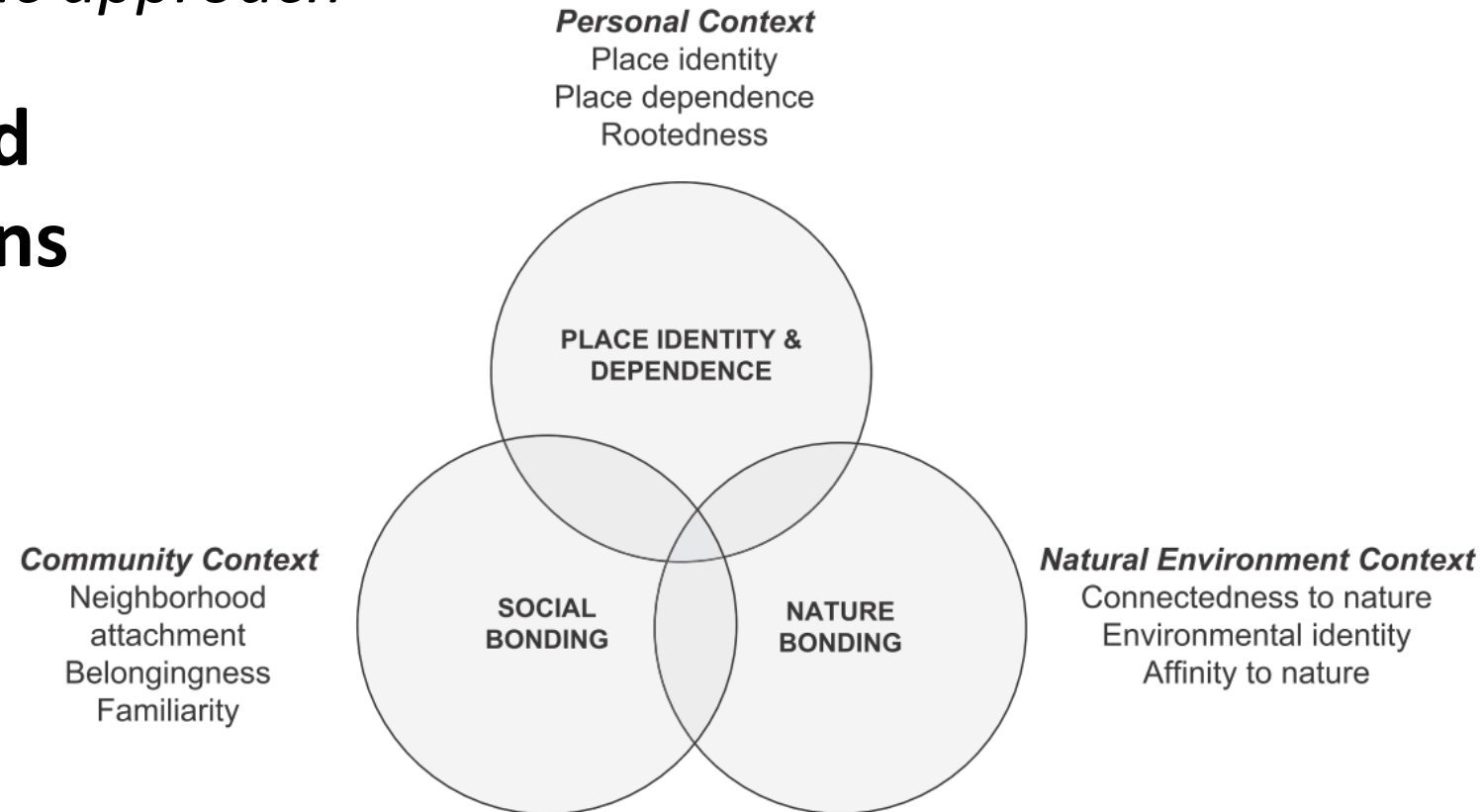
- Wolof, highly dependent to the sea, established for generations, muslim, mostly married, 4/5 of the respondents have experienced consequences of coastal risks (100% in Djougop)

Concept: sense of place

- **Place theory** : sense of place, place attachment, place meaning

The ways people relate to their local areas, their relationships with their environment, through a dynamic approach

- **Personal, community and environmental connexions**



Measuring sense of place

- **Positivist approach from environmental psychology**

Lewicka, 2011

24 items

Place attachment « *This place is part of me* »

Place inherited : « *I have strong family connexions in this city* »

Place dependence : « *I'm economically dependent to the sea* »

Place relativity : « *I don't care about where I live* »

Place alienation « *I would like to move out from this place* »

-2

-1

0

1

2

Strongly
disagree

Disagree

Neither agree
nor disagree

Agree

Strongly
agree

- **Open-ended questions + free-listing** : « *What does your neighborhood make you think about ? (3 words or expressions)?* »

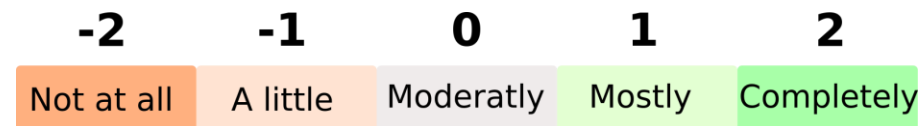
Concept: well-being

- **Well-being** : a way to measure social progress in contrast to econometric perspectives, to capture individuals' holistic sense of wellbeing, incorporating emotional, physical and social dimensions.

Abu et al., 2024

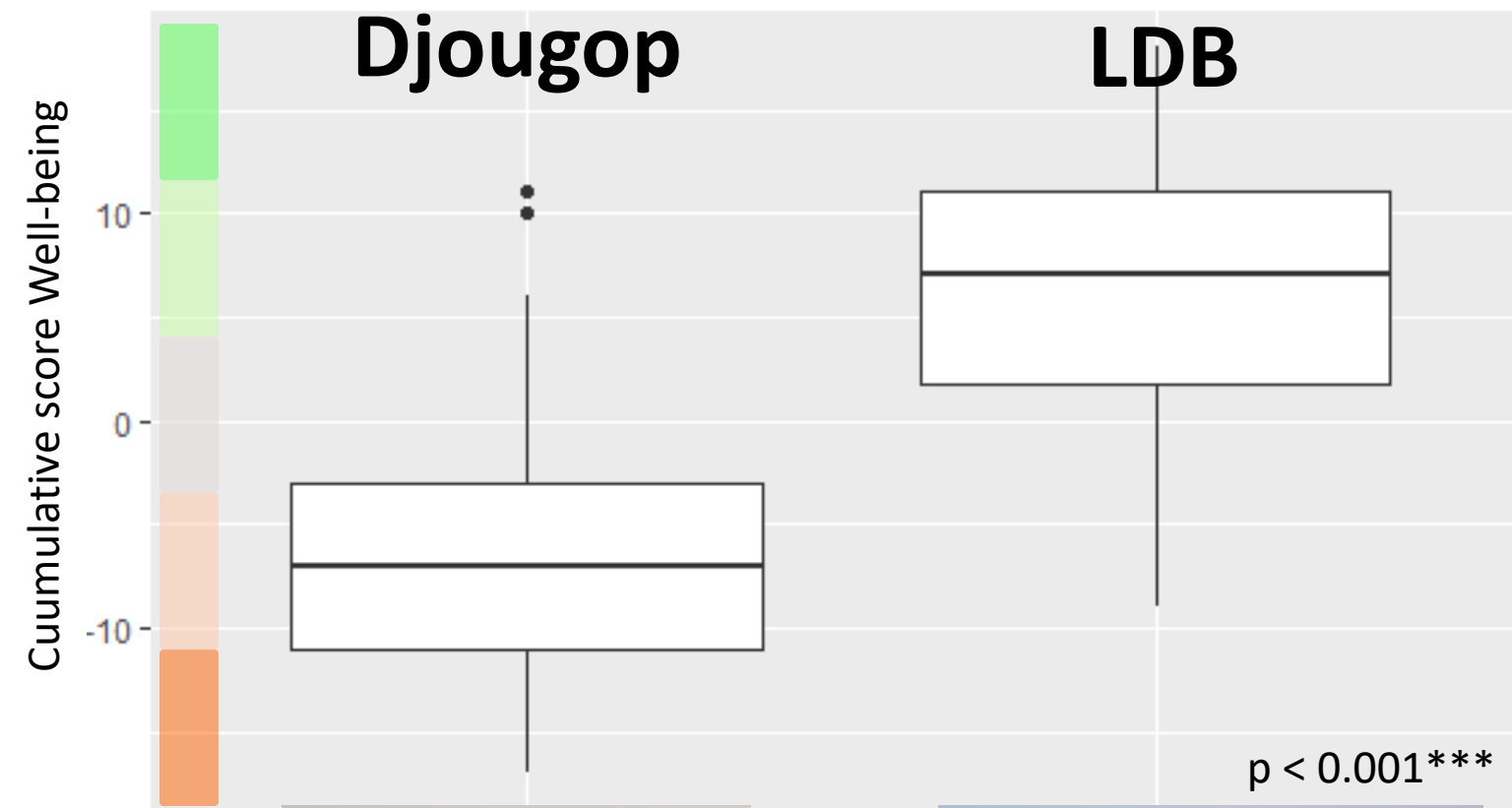
- **From social psychology** : standard World Health Organisation quality of life scale

11 items « *How satisfied are you with your daily life?* »



Raymond et al., 2010

Results – Well-being is reduced through relocation



Study site



“
We suffer from water problems and insecurity plus I'm getting old now so I don't have the strength to go miles out to sea but I have no choice as I have a family to feed.
”
(A man, Djougop)

Woman are concerned by a higher loss of well-being than man :
 $p = 0.02^*$

Results – Difficulties, nostalgia and forgotten problems



Peace

Fresh air, Sea, Work
Good neighborhood,
Solidarity, Atmosphere
My home, Quiet, Fishers
neighborhood...

Promiscuity, Relocalisation,
Coastal risks



Heat

*Distance, Difficult
transportation*

Tarps

Not good for fishers, Insecurity

*Bad conditions, Traumatism,
Loneliness*

A good place

Results – Difficulties, nostalgia and forgotten problems



*Living together,
Sea*

*Access to work, Fresh
air*

*Identity, solidarity, friends
and family*

Childhood

Old House



Heat

Difficult transportation

Lack of water

Insecurity

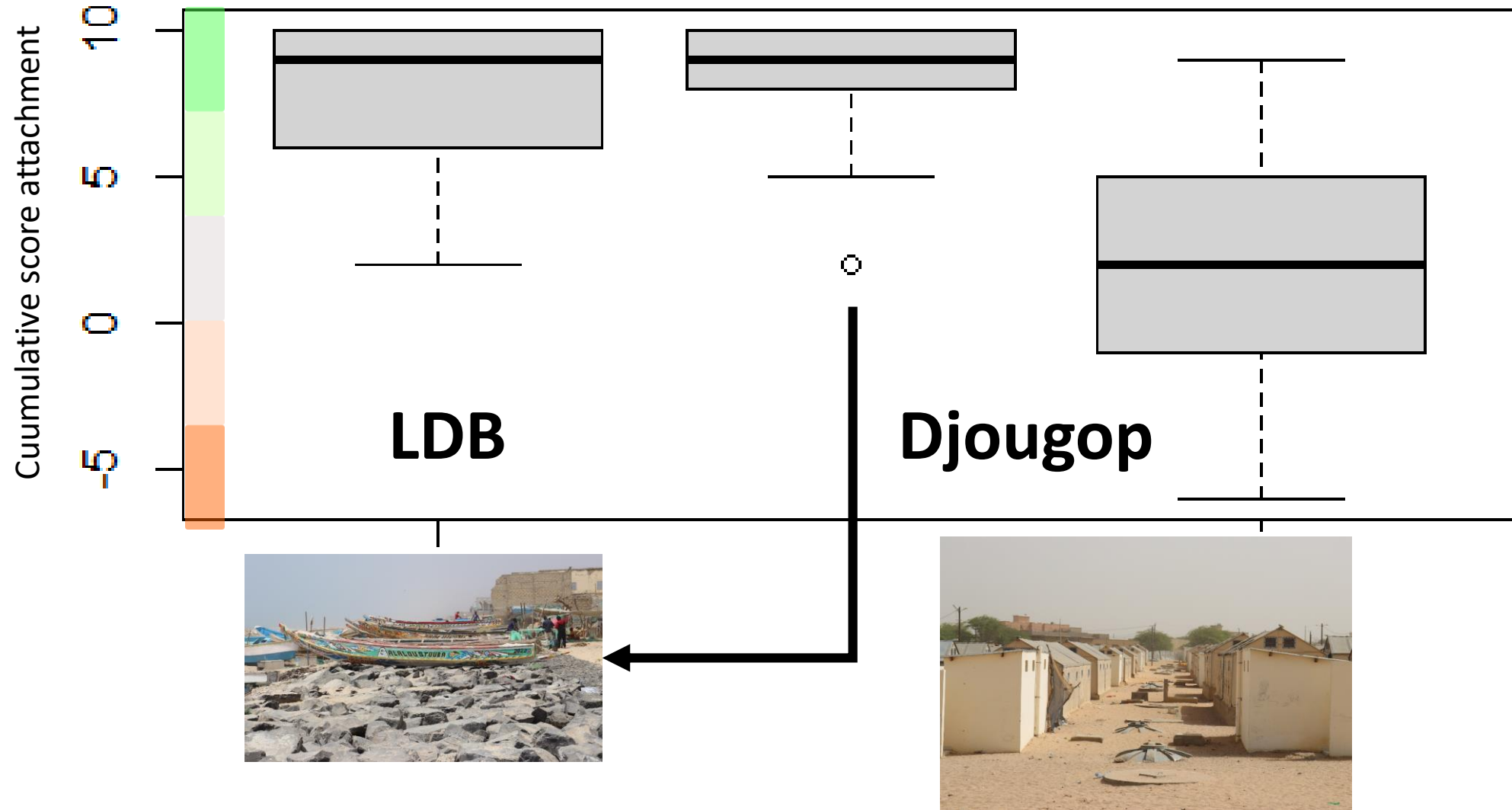
Lack of infrastructures, electricity...

Quiet, Calm

Spacious

Solidarity, new relationships...

Results – An attachment reinforced by relocation



Older people are more concerned by inherited attachment : p-value < 0.001***

Results – Multiple forms of attachment

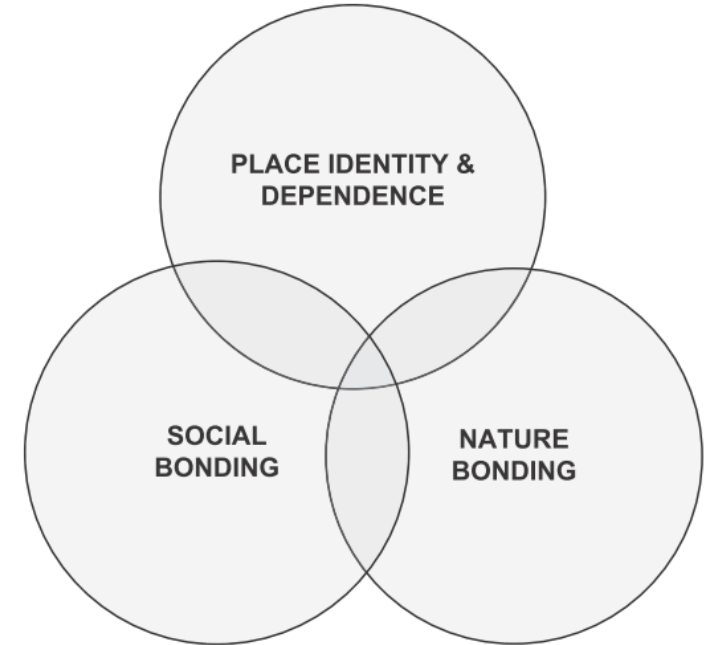
- **The sea, the family, the community**

Life is expensive, my child, and sometimes I find it hard to meet my family's daily expenses, so in the mornings, our fisherman friends who come from the sea offer us fish or money to meet my family's needs, which is no longer so simple with our new life and move to Djougop. The sea is a blessing for us, and for a healthy life too.

(A woman from Djougop)

Despite our exposure to coastal hazards, we are very attached to the Langue de Barbarie. Because of our proximity to the sea, but also because of the atmosphere that exists in the neighborhoods.

(A woman from LDB)



Results – Envisioning the future



In the LDB : the fear of the unknown

“What the sea gives us in terms of income and well-being, I don't think there's any other place that can give it to us (*A man, LDB*)

As soon as I find a better place to live, I'll leave the Langue de Barbarie, because we're confronted with climate variations (*A man, LDB*)

Ever since I heard about the relocation, I'm afraid, and I can't stop thinking about what my life will be like once I'm in Djougop (*A man, LDB*)

”

In Djougop : a reinvention « in process »

“Our living conditions here are really very difficult. I'd rather rebuild my house by the sea and go back there than stay here (*An old man, Djougop*)

It's in Djougop that we have a roof over our heads, so it's become our home, and it's a good place to be. If the water and health problems are resolved, and the housing is finished, I wouldn't want to leave Djougop (*A woman, Djougop*)

”

Envisioning the future – the use of forum-theater



Conclusion



- Strong and multiple forms of attachment, reinforced / threatened by relocation
- A loss of well-being : from coastal risks to reinforced economic, social, health vulnerabilities
- The need to acknowledge the diversity of aspirations
- A relocation « in process »
- A blind spot : between rootedness, voluntary immobility, fear of the unknown... and economic migration

EUSA EASA
ESAV BARCELONA 2024



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OPEN **Social consequences of planned relocation in response to sea level rise: impacts on anxiety, well-being, and perceived safety**

Mumuni Abu¹, Stacey C Heath², W. Neil Adger³, Samuel Nii Ardey Codjoe¹, Catherine Butler³ & Tara Quinn⁴



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Managed retreat and coastal climate change adaptation: The environmental justice implications and value of a coproduction approach

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Relocation planning must address voluntary immobility

Planned relocation of communities exposed to climate hazards is an important adaptation measure. However, relocation planning and policies must recognize and support those who do not wish to relocate, particularly groups with strong place attachment and for whom relocation may increase, not reduce, vulnerability.

Carol Farbotko, Olivia Dun, Fanny Thornton, Karen E. McNamara and Celia McMichael