

# MEASURING TERRITORIAL CAPITAL AND ITS DIFFERENT DIMENSIONS: PROPOSAL FOR A METHODOLOGY BASED ON THE POPULATION'S PERCEPTIONS AND ATTITUDES

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# TOPIC

## Rural out migration and territorial attractiveness

- ▶ **Rural out migration** : Still in progress in most countries all over the world
- ▶ This problem can be tackled from the standpoint of the relative **lack of attractiveness of the rural territories** in question (Oliveira *et al.*, 2010; Servillo *et al.*, 2012)
- ▶ One vein of scientific literature (2000-2021) links this territorial attractiveness to the **availability of resources or assets making up “territorial capital”** (OECD 2001, Camagni 2019 ; Capello & Nijkamp, 2019 ; Tóth, 2015, 2017 ; Lacquement & Chevalier, 2016)

# TOPIC (2)

## Territorial capital

- ▶ Camagni & Capello (2013) clarified the concept: “**set of localized assets (natural, human, artificial, organizational, relational and cognitive) constituting the competitive potential of a given territory**”
- ▶ Research on the concept reveals the importance of various types of material and immaterial assets.

# TOPIC (3)

## **6 dimensions of territorial capital** (*Servillo, Atkinson & Russo, 2012*)

- ▶ **environmental capital** (climate, natural resources, landscapes...)
- ▶ **anthropic capital** (built environment, architecture, infrastructure...)
- ▶ **economic capital** (firms and sectors, economic activity, employment, networks and clusters...)
- ▶ **human and social capital** (education, diversity, social network, gender and ethnic aspects, tolerance, crime, etc.)
- ▶ **institutional capital** (democracy, efficiency of the system, tax climate, participatory processes, accessibility, etc.)
- ▶ **cultural capital** (monuments and landmarks, infrastructure and services, higher education, activities, etc.).

# TOPIC (4)

## Measuring territorial capital

- ▶ Measuring this multidimensional concept remains a subject into which research is still in progress (Tóth, 2015)
- ▶ Existing contributions : rely chiefly on **objective statistical data** provided by national or international agencies (such as Eurostat and the OECD)
- ▶ Our tool relies on primary data that are compiled by measuring the population's perceptions, attitudes, and behavioral intentions.
- ▶ Our approach takes a psychological standpoint

# OBJECTIVES OF THIS RESEARCH

Proposing and testing a measurement tool (scale) :

- based on individual subjective perceptions of the inhabitants of the area : « perceived territorial capital »
- tested among a sample of young people (high school and higher education) living in rural areas in Cameroon
- relying on a two steps methodology (qualitative and quantitative) and on the TPB

# GENERAL IDEA OF THIS RESEARCH

What is important in attractiveness is not the “objective assets of a territory” but the way its inhabitants think they can mobilize these assets to carry out their own plans, to build their lives (Close to A. Sen’s theory)

When combined with individual aspirations (Suckall *et al.*, 2017), perceived territorial assets thus potentially explained the intention to stay in the territory.

The intention to stay is thus the exit variable of our model.

# CONTENTS

- ▶ Methodology
- ▶ Qualitative study
- ▶ Development and test of the measurement scale
- ▶ Conclusion



# METHODOLOGY

- ▶ Firstly : To develop a measurement scale of the territorial capital concept, we conducted two qualitative surveys (n = 40). They are intended to identify territorial resources related to the categorization of Servillo et al. (2012).
- ▶ Secondly : we conduct a quantitative survey (n = 365) in four territories in Cameroon to validate the various dimensions of the territorial capital concept and to study their respective impact on two psychological variables: a) the feeling of being able to stay in one's territory and b) anticipated regrets\* (if not building its life in one's territory)

\*In the theory of planned behavior (Ajzen, 1991) these two variables are supposed to explain the intent to live in its territory by young inhabitants.

## QUALITATIVE STUDIES

- ▶ The first one took place in a village located in the Bamileke country (mid-mountain area in Western Cameroon). Twenty semi-structured interviews were conducted on the basis of grid constructed to identify the benefits and barriers associated with the idea of staying on one's territory.
- ▶ The second was carried out in the region of Douala. The same interview grid was used.

# Results: classified according to Servillo's dimensions of territorial capital

## Human and social capital

- Living close to my family
- Living close to my friends
- The intellectual level of the inhabitants
- The level of open-mindedness of people
- Enjoying a safe place of life

## Environmental capital

- Enjoying a healthy climate
- Living in a place without pollution

## Antropic capital

- Health infrastructure
- School infrastructure
- Access to the internet
- Transportation infrastructure (railways, roads)
- Access to drinking water
- Access to electricity

## Institutional capital

- Getting involved in the local development

## Economic capital

- Access to capital and funds
- Purchasing local products at affordable prices
- Being able to feed myself at low cost
- Finding housing at an affordable price
- Level of economic activity in the region
- Take advantage of family economic asset
- The possibility of practicing agriculture

## Cultural capital

- Being able to keep alive the cultural heritage
- Enjoying my regional culture
- Accessing entertainment

# Development and test of the measurement scale

## Survey

Beliefs about territorial resources identified in the qualitative surveys were measured either as benefits or as barriers (total: 34 items):

- ▶ Benefits are measured with items such as "staying in my territory would allow me to ..." and with a 7-point Likert scale ranging from 1 (totally disagree) to 7 (totally agree).
- ▶ Barriers were measured with items such as "please evaluate how the factors below constitute a barrier that could prevent you from staying on your territory" and with a 7-point Likert scale

## Development and test of the measurement scale (2)

- ▶ **Dependent variables** : measured with a 7-point Likert scale. PBC: 3 items (alpha de Cronbach: 0.65); Anticipated regrets: 4 items (alpha de Cronbach: 0.78); Intention: 3 items (alpha de Cronbach: 0.81).
- ▶ **Administration**: took place in four different areas: an urban center, two territories in the Bamileke region (Bafoussam and Dschang), and in the Penja area.
- ▶ Sample characteristics are the following: women (57.8%); average age : 20,2 years old; 52.1% are high school students and 40.3% are middle school student.

## Development and test of the measurement scale (3)

- ▶ Several exploratory factor analyses were conducted (under SPSS 23, using a principal component analysis, PCA). All the benefits and barriers have been incorporated into the same analysis.  
(We remove from the analysis items which loading are  $<0.5$  or those which loading are distributed on several components, 11 items).
- ▶ The last structure matrix showed a 7-component solution (23 items) with a variance extracted close to 60% (60.3%).
- ▶ All retained items loaded highly on the appropriate factor and no item loaded on more than one factor, supporting the independence of the constructs and providing strong empirical evidence of their validity. (All Cronbach alphas were above 0.65, indicating satisfactory reliability).

## Dimensions of territorial capital that came out of the survey

In a final step, the seven dimensions were labelled in comparison with Servillo et al. (2012) original framework.

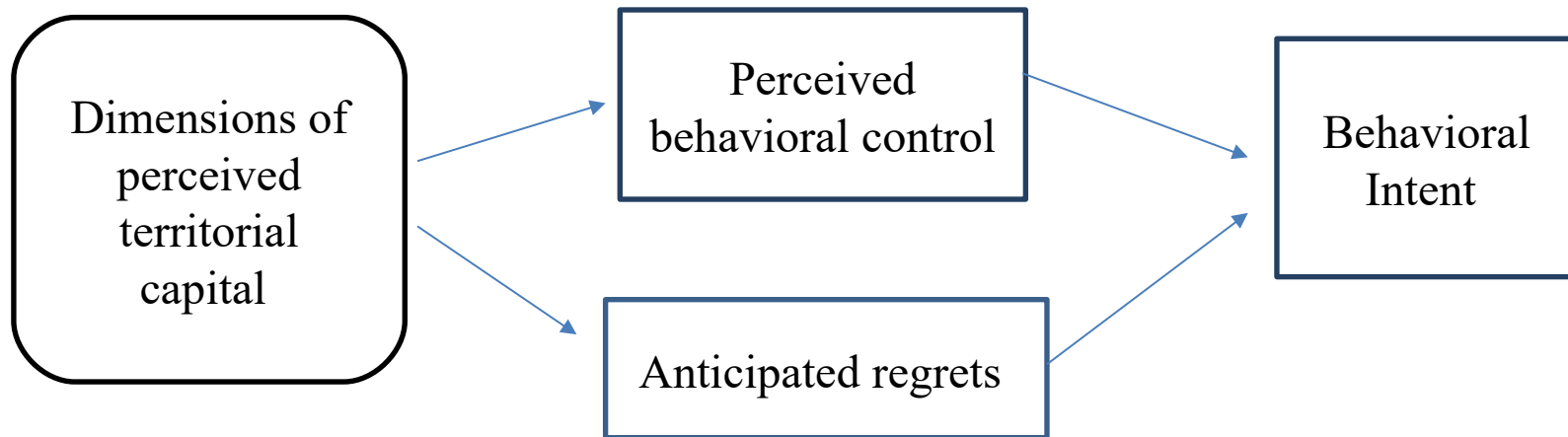
Several adaptations appear:

- The cultural capital dimension disappears to blend in the human and social capital.
- Human and social capital doubles up by revealing another dimension: the **cognitive infrastructure** (the openness of the inhabitants).
- Economic capital also doubles up with a **general dimension** (access to capital, economic activity, water and electricity networks) and a **dimension centered** on the possibility of living at low cost (the possibility of practicing agriculture, purchasing food and housing at low cost).

# Nomological validity of the measurement scale

To evaluate the scale's nomological validity, we investigated the relationship of its individual dimensions to the relevant constructs: the feeling of being able to stay in one's territory and anticipated regrets.

We use the following model to test the nomological validity of our measuring instrument for territorial capital (using TPB):





## Nomological validity of the measurement scale

- ▶ We conduct confirmatory factor analysis and structural equation modeling (with Amos 23). (The model adjusts well with data)
- ▶ The seven dimensions explain 45.8% of the feeling of being able to stay and 29.5% of anticipated regrets.
- ▶ These two variables explain 60.6% of behavioral intention formation with a very strong impact of the feeling of being able to stay (0.653,  $p < 0.001$ ) and a lowest impact of anticipated regrets (0.292,  $p < 0.001$ ).

## Development and test of the measurement scale (6)

Four dimensions impact one or the other of the two dependent variables: PBC and Anticipated regrets (AR).

- ▶ Human and social capital (most predictive dimension) : .470\*\*\* sur PBC, .385\*\* sur AR.
- ▶ Environmental capital: .579\*\* sur AR.
- ▶ Institutional capital: .342\*\* sur PBC
- ▶ Cognitive infrastructure: .241\* sur PBC

Therefore, retention of young people on a territory seems to go through policies that aim to increase these four kinds of resources.

# CONCLUSION

- ▶ We contribute to the construction of a psychological current within approaches to migration (Schwartz *et al.*, 2020)
- ▶ We produce and test a measuring instrument based on people's perceptions.
- ▶ 2steps:
  - an exploratory phase to pick out the possible specific characteristics of a given territory
  - the creation and finally validation (convergent, discriminant, and nomological validation based on the Theory of Planned Behavior) of measurement scales for the various dimensions of territorial capital.
- ▶ A relevant (Musson 2010) and flexible method enabling to take account of the singularities of each territory and to make comparisons

## CONCLUSION (2)

Empirical results regarding the dimensions of territorial capital :

- social and human, environmental, institutional, **cognitive**, economic, anthropic and the **cost of living**
- **Cognitive capital close to the** concept of intellectual capital (Tóth, 2017; Dąbrowska & Szlachta, 2017; Januškaitė & Užienė, 2018)

Thank you  
for attention