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- Title: Global Smart Cities And The Conditions For Urban Attractiveness Author(s): Giulia Xisto₁, Roberto Schoproni Bichueti₂*, Jordana Marques Kneipp₃, Clandia Maffini Gomes₄, Walter Leal₅,
- Affiliation (s): 1 Federal University of Santa Maria UFSM; 2 Federal University of Santa Maria UFSM; Hamburg University of Applied Sciences HAW Hamburg;
 3 Federal University of Santa Maria UFSM; 4 Federal University of Rio Grande FURG;
 5 Hamburg University of Applied Sciences HAW Hamburg; Manchester Metropolitan University; *Correspondence: roberto.bichueti@ufsm.br





Abstract: Smart cities have been conquering more space into debates about city management and have been treated as attractive cities to talents, tourists, visitors, and investors due to the alliance between innovation, environmental quality, and social and cultural inclusion. Therefore, it can be understood that smart cities are connected to urban attractiveness. Given this context, this study aimed to verify the relation between the degree of intelligence and the level of urban attractiveness in global smart cities. This is a quantitative and descriptive study since it used descriptive statistics through least-squares partial regression. Our findings showed a strong positive correlation between the cities' levels of intelligence, lifestyle, and consumption. Nonetheless, the relation between the level of intelligence and the flow of people was not confirmed in these cities.

Keywords: Smart cities; Urban attractiveness; City planning.

1. Introduction

Smart cities are not just cities that use more advanced technology than others, but those that put their efforts to improve sustainable development, which increases life expectancy and innovation and reduces the various problems of unplanned urban growth. Urban planning is one of the essential tools for development; thus, cities can perform their functions satisfactorily, monitoring life and environmental quality. Another important aspect of urban planning is the flow of individuals; the flows of people are an urban phenomenon that should be seen as central to planning and urban development in big cities. This phenomenon has been marked by multiple motivations throughout history, although globalization is the main influence. Therefore, given the importance of relating healthy urban development in the cities to its attractiveness to people, this study developed the following research question: What is the relation between the degree of intelligence and the level of urban attractiveness in global smart cities? Given this context, this study aimed to verify the relation between the degree of intelligence and the level of urban attractiveness in global smart cities.

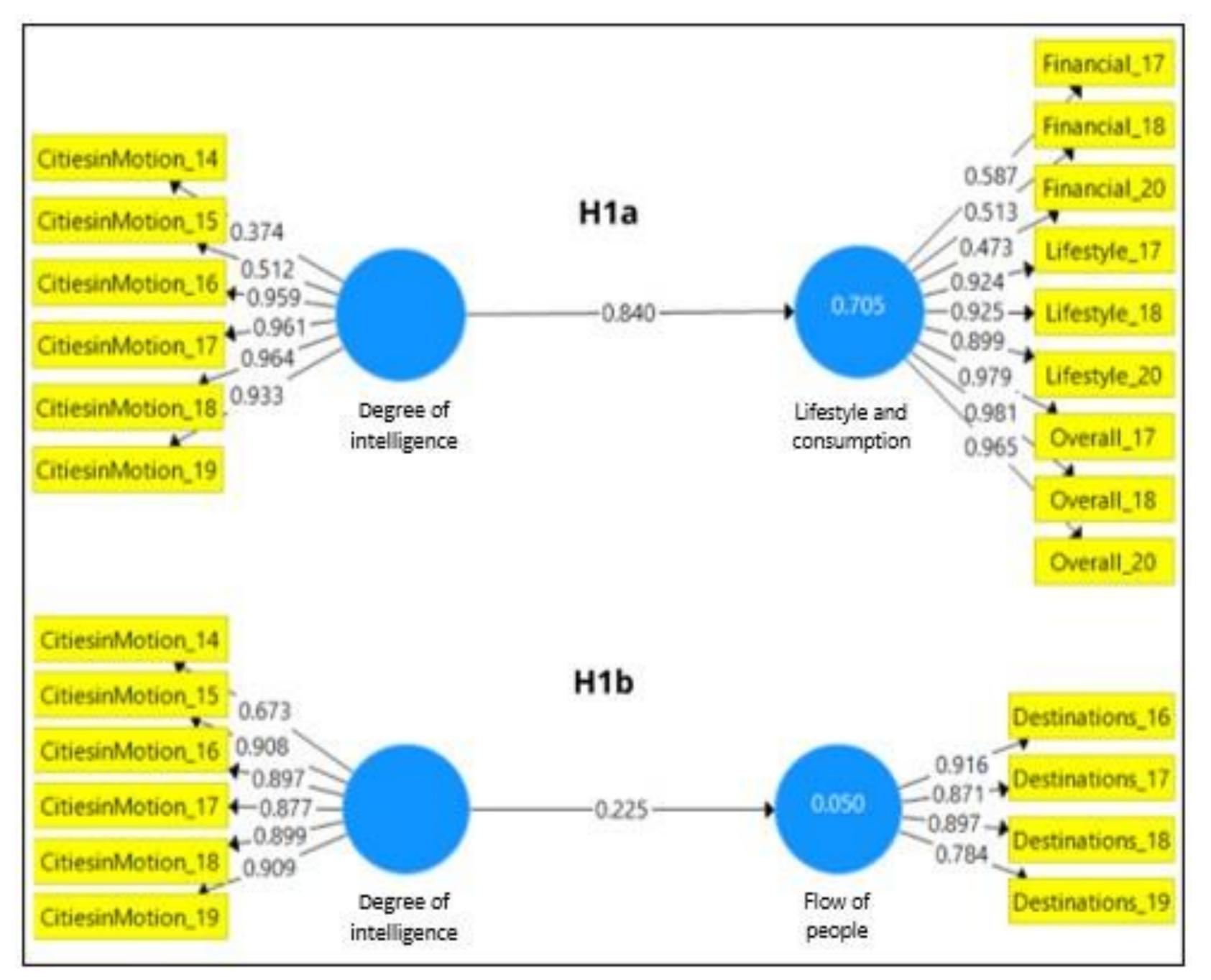
2. Methodology

This is a quantitative and descriptive study since it aims to delineate or analyze characteristics of facts or phenomena using statistic controls to provide data that may verify the hypotheses. Therefore, we sought to verify the relation between the degree of intelligence in the cities in the ranking Cities in Motion Index 2019 and their urban attractiveness based on the rankings Global 150 Index 2018 and Top 100 Destinations from Euromonitor 2019. The database was constructed with data available from the three rankings, configuring secondary data collection. Information was collected from 174 cities between 2014 and 2019 from Cities in Motion, 150 cities between 2017 and 2020 from the Global 150 Index, and 100 cities between 2016 and 2019 from the Top 100 Destinations. The statistical analysis was performed by compiling data about the cities reaching the fi-nal number of 115 cities and using the partial least squares (PLS; i.e., least-squares partial regression) method. We sought to confirm the following hypothesis and its divisions: H1: Cities with a higher degree of intelligence have higher levels of attractiveness.; H1a: Cities with a higher degree of intelligence have higher levels of lifestyle and consumption. H1b: Cities with a higher degree of intelligence have higher levels of the flow of people.

3. Results

From these results, it is understood that the relations between the cited models are well-supported, and it is possible to highlight the hypothesis test results: H1: Cities with a higher degree of intelligence have higher levels of attractiveness: Partially confirmed; H1a – Cities with a higher degree of intelligence have higher levels of lifestyle and consumption: Confirmed; H1b – Cities with a higher degree of intelligence have higher levels of the flow of people: Not confirmed.

4. Conclusions



Through the methodology proposed herein and the data collected, it was possible to answer the research question. Therefore, it is possible to conclude that the purpose of this study was contemplated once the proposed hypotheses were analyzed. Cities are intelligent when they improve the quality of life and seek to lower the costs for their residents and visitors, guaranteeing a better life for the individuals. These pillars measure urban attractiveness and are positively linked to the pillars of smart cities. When they are strong, changes resulting from the flow of people do not necessarily become negative points because well-structured governance that uses technology in favor of urban planning and environmental preservation can ensure being simultaneously intelligent and attractive.