



INSTITUTO
UNIVERSITÁRIO
DE LISBOA

Exploratory studies on digital nomads' willingness to stay in Lisbon

Taciane Azevedo Andrade

Erasmus Mundus Masters in Tourism Development and
Culture

Supervisor:

Dr. Álvaro Lopes Dias, Assistant Professor
ISCTE Business School

June 2023

Department of Marketing, Strategy and Operations

**Exploratory studies on digital nomads' willingness to stay
in Lisbon**

Taciane Azevedo Andrade

Erasmus Mundus Masters in Tourism Development and
Culture

Supervisor:

Dr. Álvaro Lopes Dias, Assistant Professor
ISCTE Business School

June 2023

Abstract

Portugal's capital, Lisbon, is one of Europe's most well-liked tourist destinations. It is a multicultural city with a business center that houses major technology companies and professionals in this field, including digital nomads. High demand for tourist accommodation and the arrival of foreigners to work in the country has resulted in an imbalance in real estate availability and affordable costs for residents in the capital.

In this context, this dissertation was initially carried out through a literature review on the profile of digital nomads, the current situation, and challenges in Lisbon to receive more residents considering the cost of living in the capital and challenges with lack of accommodation. This work aims to explore and determine if the digital nomads in Lisbon intend to settle in the city or if they are passing through. In addition, to develop ideas for cultural and community planning decisions for Lisbon to contribute to future studies in social policies and managing the housing crisis for Lisbon society. Four variables were studied, and the correlation between them aimed to determine if they influence digital nomads' decision-making.

The chosen methodology could qualitatively and quantitatively explore the results collected through online questionnaires. The research results supported responding to the study's problem and the stipulated hypotheses, demonstrating that although community attachment and the cost of living influence the willingness to stay, for digital nomads, this lifestyle is long-term, as the stay in Lisbon is of medium duration.

Keywords: Cultural development, public policy, digital nomad, Lisbon.

JEL Codes: Z18, Z38, O33

Resumo

A capital de Portugal, Lisboa, é um dos destinos turísticos mais populares da Europa. É uma cidade multicultural com um centro de negócios que abriga grandes empresas de tecnologia e profissionais da área, incluindo nômades digitais. A elevada procura de alojamento turístico e a vinda de estrangeiros para trabalhar no país tem resultado num desequilíbrio na disponibilidade de imóveis e custos acessíveis para os residentes.

Neste contexto, esta dissertação foi inicialmente realizada através de uma revisão bibliográfica sobre o perfil dos nómadas digitais, a situação atual e os desafios em Lisboa para receber mais residentes tendo em conta o custo de vida na capital e os desafios com a falta de alojamento. Este trabalho pretende explorar e determinar se os nómades digitais em Lisboa pretendem instalar-se na cidade ou se estão de passagem. Além disso, desenvolver ideias para decisões de planeamento cultural e comunitário para Lisboa e contribuir para estudos futuros em políticas sociais e gestão da crise habitacional para a sociedade lisboeta. Quatro variáveis foram estudadas, e a correlação entre elas teve como objetivo determinar se elas influenciam a tomada de decisão dos nômades digitais.

A metodologia escolhida pôde explorar qualitativa e quantitativamente os resultados coletados por meio de questionários online. Os resultados da investigação permitiram responder ao problema do estudo e às hipóteses estipuladas, demonstrando que embora o apego à comunidade e o custo de vida influenciem a vontade de ficar, para os nómadas digitais, este estilo de vida é de longo prazo, sendo a estadia em Lisboa de média duração.

Palavras-chave: Desenvolvimento cultural, políticas públicas, nómade digital, Lisboa.

JEL Codes: Z18, Z38, O33

TABLE OF CONTENTS

1.	Introduction	1
2.	Research question and objectives.....	3
3.	Literature review and hypothesis development.....	4
	3.1. DIGITAL NOMAD OVERVIEW	4
	3.2. LISBON FOR DIGITAL NOMADS	5
	3.3. WILLINGNESS TO STAY AND ITS INFLUENCING FACTORS	6
	3.4. COMPLEXITY THEORY	8
	3.5. HYPOTHESES	10
4.	Methodology.....	11
	4.1. APPROACH	11
	4.2. VARIABLES AND MEASUREMENT	12
	4.2.1. DETERMINANT VARIABLES.....	12
	4.2.2 MEASUREMENT.....	16
	4.3. SAMPLE FRAME	18
5.	Results.....	20
	5.1. SAMPLE IDENTIFICATION AND CLASSIFICATION.....	20
	5.2. STATISTICAL ANALYSIS	23
	5.2.1. QUANTITATIVE ANALYSIS	23
	5.2.2. QUANTITATIVE RESULTS	24
	5.2.3. QUALITATIVE ANALYSIS	24
	5.2.3.1. Analysis of sufficient conditions for willingness to stay.....	25
	5.2.4. QUALITATIVE RESULTS	26
6.	Discussion	28
	6.1. COMMUNITY ATTACHMENT.....	28
	6.2. COST-BENEFIT.....	28
	6.3. VISA NO VISA	29
7.	Conclusion	30
	7.1. THEORETICAL CONTRIBUTIONS	30
	7.2. PRACTICAL IMPLICATIONS.....	30
	7.3. LIMITATIONS AND FUTURE RESEARCH.....	31
	Reference list.....	32

1. Introduction

The Portuguese capital Lisbon is a center of attraction for tourists and immigrants due to its richness in culture, quality of life, tourist attractions, and good summer climate. Lisbon has recently invested in becoming a technologically advanced hub (Poder, 2021), attracting large technology companies and professionals in this area.

In a post-pandemic scenario, some countries, such as Portugal, see digital nomads as having the potential to restart the economy after the 2020 pandemic and an attractive visa policy for remote workers (Forum & Altringer, 2015). Lisbon has recently opened visas focusing on digital nomads called the “D7 Digital Nomad Visa”. The visa will allow non-Europeans who work remotely to apply for a temporary residency visa and relocate to the country (SchengenVisaInfo.com, 2022).

In addition to the numerous tourists and visitors that Lisbon receives, along with the visa incentive for digital nomads, Cocola-Gant et al. (2020) claim that there is pressure in the local community concerning the cost of living and lack of accommodation. The media often point out the arrival of digital nomads as one of the causes of the high price of houses and the lack of supply for Lisbon residents. A rise in foreign investment and short-term rentals, along with the city's growing tourist appeal, have all contributed to rising housing costs and the eviction of long-term residents (Monteiro, 2023). This rise is partially attributable to the popularity of short-term rentals like Airbnb, which have fewer long-term rentals available, and increased housing competition (Statistics Portugal, 2022).

Although there are many studies on digital nomads and their motivations to maintain this lifestyle (Shukla & Khatri, 2022), there is room for research on this public and its relationship with the place they chose to reside; furthermore, to understand whether the chosen destination can be their permanent residence. From this perspective, this study intends to explore the profile of digital nomads in Lisbon and what motivated them to come to the Portuguese capital; additionally, to understand whether Lisbon is a temporary destination or if this public intends to stay permanently in Lisbon.

As a final goal, it is intended to identify the profiles of Lisbon's digital nomads, analyze the reasons for moving to the Portuguese capital; compare and identify motivating factors by employed variables and determine whether they would like to maintain their residence in Lisbon; provide suggestions for cultural and community planning decisions for the city of Lisbon; and contribute to future studies in social policies and housing crisis management for Lisbon's community.

To examine such conditions, this work proposes a qualitative and quantitative methodology to investigate the independent variable of willingness to stay and the dependent variables of community attachment, the cost-benefit of living in Lisbon, and the holding or not of the digital nomad visa, referred to as Visa-No-Visa variable.

First, a theoretical investigation was conducted into digital nomads, Lisbon, and potential problems with the city's housing and living expenses. The data is then collected using online surveys and analyzed quantitatively with Partial Least Squares (PLS), a variance-based structural equation modeling technique (Ringle et al., 2015), and qualitatively with FsQCA, a set-theoretic analytical technique presented by Misangyi et al. (2017).

2. Research question and objectives

The aim of this dissertation relies on understanding the digital nomads' willingness to stay in Lisbon and if the visa impacts the decision-making process, as well as identifying other factors that affect their willingness to stay. Therefore, the research question could be posed: Does the visa affect digital nomads' willingness to stay permanently in Lisbon? Is Lisbon the ideal location for digital nomads, or is it where digital nomads go to settle down?

Within that scope, three main research objectives were established:

- i. Identify Lisbon's digital nomads' profiles, analyzing the reasons for moving to the Portuguese capital.
- ii. Compare the identified motivating factors by employed variables and determine whether they would like to maintain their residence in Lisbon.
- iii. Provide suggestions for cultural and community planning decisions for the city of Lisbon.
- iv. Contribute to future studies in social policies and housing crisis management for Lisbon's society.

3. Literature review and hypothesis development

3.1. Digital nomad overview

Being able to work remotely and lead a location-independent lifestyle make digital nomads a relatively new and rapidly expanding group of professionals. Therefore, as a direct consequence, they frequently travel widely, living and working in various countries and cities for extended periods. Although this way of life has grown in popularity recently, there is still much that academics and researchers are exploring about this group and their effects on the economy and society (Shukla & Khatri, 2022).

Digital nomadism as a lifestyle refers to the ability for people to work remotely from their laptop and use the lack of dependence of attending a physical office space to travel the world (Thompson, 2018). Being a digital nomad requires having both the “urge to travel” and the means to do so (Makimoto & Manners 1997, p.17).

The expression “digital nomad” first appeared in the eponymous book by Makimoto & Manners in 1997, and its use was intended to foretell how technological advancements would eventually enable people to become mobile workers worldwide (Makimoto & Manners, 1997). Their prediction became a reality less than 20 years later, as researchers and journalists now commonly refer to professionals who primarily use digital technologies to perform work while living a location-independent lifestyle as digital nomads (Reichenberger, 2018).

Digital nomadism, however, is still a term with a hazy definition in popular literature for several reasons. First, the terminology used to describe digital nomadism is transmissive because it only slightly differentiates itself from related phenomena. And secondly, because it results from various ongoing developments and shifting work-related movements, digital nomadism has a constantly changing character (Ciolfi et al., 2014).

Therefore, understanding these historical developments and pointing out the term's distinctions from other terminologies is necessary to understand the term comprehensively. This information identifies three basic traits of digital nomads and establishes a precise definition of the term (Nash et al., 2021).

Previous research has acknowledged the close ties between mobile work, nomadic work practices, and digital technologies (Ens et al., 2018; Nelson et al., 2017). In the literature, workers who travel to meet with clients or other business associates have previously been described as nomadic workers (Mark & Su, 2010). Recent studies highlight the evolution of nomadic workers, who depart from the traditional definition by traveling for fun or other reasons and for varying amounts of time (Aguilera, 2008; Nash et al, 2018; Richards, 2015). With various definitions of mobile work, nomadic workers are typically distinguished from

others by their willingness and capacity to move their work to various locations (de Carvalho, Ciolfi, & Gray, 2011). Nomadic workers must be capable of sustaining both mobile social interactions and mobile lifestyles (BenMoussa, 2003; Humphry, 2014). Mobile technologies allow them to continue these social interactions while working in different environments (Hemsley et al., 2020; Karanasios & Allen, 2014).

Academic studies have investigated the motivations and characteristics of digital nomads. According to Hall et al. (2019), more freedom, adaptability, and work-life balance are common goals for digital nomads. They frequently have advanced degrees, professional experience, and access to digital tools to collaborate and work remotely with people worldwide.

Thompson (2018) studied that this community does not randomly choose temporary relocation destinations. There are a couple of digital nomads' "hotspots" worldwide, according to diverse websites and blogs, such as Medellin, Colombia, Bali, Indonesia, Chiang Mai, Thailand, and Lisbon, Portugal (Nomad list, 2018; Poder, 2021). Nash et al. (2018) argue that it is likely due to a destination's potential for leisure pursuits such as surfing, hiking, and skiing, whereas Reichenberg (2018) believes that lower living costs have a significant impact.

3.2. Lisbon for digital nomads

The Portuguese capital combines Portugal's cultural and historical heritage. To the north and south of the capital, a diverse range of landscapes and heritage is always within easy reach, with beaches, natural parks, cultural activities, and accommodations for all tastes. Lisbon, located in the center of Portugal, attracts visitors for the value and variety of cultural activities it offers and for the summer climate of sun and sand combined with rich entertainment and nightlife.

In recent decades, Lisbon has significantly invested in attracting international businesses, particularly technology. Lisbon has recently invested to become a technologically advanced polo (Poder, 2021). The city strives to offer low operational costs and to host technology events such as the Web Summit, Europe's largest conference devoted to the industry and hosted by Lisbon since 2016 (Poder, 2021). The most recent initiative was the creation of a program called "Lisbon's Growth Program", which offers up to € 500 million (R\$ 3.3 million) in benefits to startups and businesses in the sector (Poder, 2021). As a result of the incentive and subsequent arrival of large technology companies, Lisbon is now offering coworking and co-living spaces to accommodate the influx of professionals from the area who have relocated to the Portuguese capital. These spaces are very popular among technology workers with the flexibility to work remotely and hybridity. The growth of this lodging model is appealing to digital nomads as it

also provides the environment and infrastructure they are predisposed to having as accommodation in their preferred destinations.

Work travel, a more recent trend, has co-living spaces as a component of coworking in exotic locations or locations that promise exploration of new areas or advantages such as warm weather, beaches, or tranquil surroundings for recreation. This trend is also known as “coworkation”, an inspirational coworking retreat held in beautiful locations worldwide within a coworking and co-living space (Reichenberger, 2018). Some countries see digital nomad tourism as having the potential to restart the economy after the 2020 pandemic by instituting an attractive visa policy for remote workers (Forum & Altringer, 2015). Portugal has recently opened an option for visas focusing on digital nomads called the “D7 Digital Nomad Visa”. The visa will allow non-Europeans who work remotely to apply for a temporary residency visa and relocate to the country (SchengenVisaInfo.com, 2022).

Due to the numerous visitors the city has drawn in recent years, Lisbon has undergone rapid development and has put tremendous pressure on its residents (Cocola-Gant et al., 2020). Even though it appears that digital nomads are one of the groups that the city is drawing more and more from, there hasn't been much academic research on how these individuals interact in different locations.

Studies of digital nomads have often concentrated on aspects of the lifestyle, and most data about its demography can be found mostly on blogs, social media, and other arguably slanted sources of information (Reichenberger, 2018). Beaumont (2019) claims that academic research surrounding digital nomads and their relationships to the places they visit could be a helpful first step in informing place when referring to Lisbon and how the population uses, analyzes, and understands its environment and facilities. Currently, because there is a shortage of knowledge about digital nomads and their relationships to places, digital nomad 'hotspots' such as Lisbon, will be unable to make informed decisions about future developments within the place that meet the expectations of both residents and transient communities (Beaumont, 2019).

3.3. Willingness to stay and its influencing factors

Environmental psychology, geography, and urban planning have all investigated the idea of willingness to stay or “place attachment”. As a result, numerous authors have contributed to comprehending this concept. Edward Relph argues that a “sense of place” describes people's emotional and psychological attachments to their surroundings. He claimed a strong sense of place could encourage community cohesion and well-being (Relph, 1997). Yi-Fu Tuan, a geographer, is another author who has contributed to the comprehension of place attachment.

He emphasized the significance of people's emotional and cognitive interactions with their physical environment in shaping their sense of identity and belonging (Tuan, 2013).

One's propensity to remain in a particular community can be strongly predicted by the degree of community attachment (Stedman, 2002; McMillan et al., 1986). People and organizations can contribute to developing a more secure and resilient community by fostering a sense of belonging and connection. Community attachment is how a person feels connected and identifies with their community.

A growing body of academic literature investigates the factors influencing community attachment in various groups, including digital nomads. Researchers have identified important components that shape community attachment, including social ties, a sense of belonging, place-based identity, quality of life, and economic factors (Hidalgo & Hernandez, 2001; McCool & Martin, 1994). Hidalgo and Hernandez (2001) explain that social connections and ties to other people in a community can be a major component of cultivating attachment. As it relates to digital nomads, finding ways to network with locals or other digital nomads in the area, such as through co-working spaces or online communities, may be part of this for these individuals.

An additional factor in attachment is having a sense of community. This may entail having a sense of belonging and acceptance from others in the neighborhood as well as a sense of shared identity or values (McCool & Martin, 1994). Feeling a connection to a place's past, present, or environment may be necessary for this. Furthermore, life quality and economic factors play an important role in the sense of community and identity. Community attachment can also be influenced by the overall quality of life in a community, which includes factors such as safety, affordability, and access to amenities (Patwardhan et al., 2020). Therefore, the cost of living can influence the willingness to stay in a particular city or location.

Digital nomads may find it financially unsustainable to leave a city if the cost of living is too high, especially if they aren't making enough money to support themselves or if the costs associated with daily expenses are excessive. As a result, there may be less sense of belonging to the community.

It is crucial to remember that many other factors could affect a digital nomad's willingness to stay in a specific area; the aspects pointed out in this study will cover some of them. Other elements, such as the standard of living, cultural attractions, safety, accessibility to coworking spaces, and environmental matters, may also be a decision point, as discussed by Song et al. (2019). Finding places that offer a good balance of affordability and quality of life and

opportunities to pursue their work may play a fundamental role in digital nomads' decision to stay in certain destinations.

3.4. Complexity theory

Based on the prior literature on digital nomads and Lisbon as the hotspot point of the investigation, this research aims to determine whether the pre-specified concepts as points that can influence a person's willingness to stay at an expected location, apply to the demographics of digital nomads living in Lisbon. Thompson (2019) suggests that future research opens the question of whether this way of living is temporary for some people while they search for the ideal place to settle down and have their lives established or if it is an indefinite way of living. At the same time, Beaumont (2019) questioned whether Lisbon is just another destination for digital nomads or if it's a place where they go to die.

Aside from that, there are certain elements and aspects of Lisbon that support and encourage to study of the said sample in the Portuguese capital. In the first place, it seeks to understand the specific intention of this public to remain indefinitely or not in Lisbon. This is because it is believed that more foreigners living in Lisbon will diversify the city's demographics with different cultures and nationalities. Similarly to several other cities in Europe, Lisbon is a multicultural city. Various cultures and ethnicities are not inherently problematic; rather, they can enhance many aspects of a city, such as its cuisine, arts, music, and cultural heritage. However, immigrants and other foreign communities can present challenges and tensions regarding social integration. Authorities and society must work together to ensure that all communities are treated with respect and justice and that all residents benefit from Lisbon's rich cultural diversity.

Although various cultures may add new dimensions to Lisbon's identity, the city must uphold its cultural heritage and traditions, ensuring its identity is not lost amid cultural diversity.

The present condition of Lisbon's tourism industry, which also directly affects the real estate market, is another driving factor behind this research. Several academic studies have recently highlighted the positive and negative aspects of Lisbon's tourism industry growth, which has recently impacted the local community. As a direct result of over-tourism raised by academics, these studies point to issues with accommodation and re-urbanization of traditional neighborhoods to lure tourists (Daly et al., 2021). These issues include rising housing costs, displacing locals, and harming the environment (Ribeiro & Torkington, 2022).

Furthermore, the growth of immigrants is also directly linked to issues with adequate housing and habitation for the population of Lisbon (Da Cunha et al., 2023), in addition to

significantly affecting the Portuguese culture. The housing shortage issue in Lisbon is linked to various factors and demographic groups, such as tourists and immigrants and growing foreign investment in the city's real estate market. The rise in immigration has been emphasized and investigated as a factor in Lisbon's multiculturalism, in addition to the problems with tourism and its effects on regional culture and tradition.

A rise in foreign investment and short-term rentals, along with the city's growing tourist appeal, have all contributed to rising housing costs and the eviction of long-term residents. The Portuguese Association of Real Estate Professionals and Companies (APEMIP) reported in 2021 that the average rent in Lisbon increased by 16.7% in 2020 to reach an average of €1,251 per month (Imobiliário, 2022). This rise is partially attributable to the popularity of short-term rentals like Airbnb, which have fewer long-term rentals available and increased housing competition.

Moreover, Lisbon suffers from a severe lack of social housing. The Lisbon Municipal Council reported that there are currently over 26,000 families waiting for social housing, with an average wait time of about seven years (Redação, 2023). Interestingly, gentrification has resulted in the displacement of longtime residents and an increase in property prices in Lisbon's historic neighborhoods like Alfama and Mouraria. A study by the University of Lisbon found that between 2011 and 2019, the number of residents in these neighborhoods fell by about 15%, while the number of short-term rentals rose by roughly 1,200% (Lestegás & Gonzales, 2019).

In this current context of Lisbon, considering the factors that draw digital nomads to the city and the economic and social challenges the government faces to overcome them, it is envisioned that this research will assist in assessing whether digital nomads intend to settle permanently in Lisbon. This is because the current housing shortage, primarily caused by a lack of affordable prices and the rise of short-term accommodations, is already an issue related to public policy. It is believed that encouraging the arrival of digital nomads will only make this issue aggravate.

Finally, it is critical point to understand whether the culture of Lisbon and the local community have an impact on the digital nomad's decision to stay or whether this point, despite being cited by many academics as a critical factor in the decision to stay, does not apply to this group of people.

Should it be ascertained that this demographic exhibits a desire to remain in the city because of this research, it is sought to hope to support Lisbon's public and economic policies in managing challenges related to housing shortages and economic and social groups.

Additionally, the city will acknowledge the group of digital nomads as a component of the city's urban culture.

3.5. Hypotheses

The following hypotheses were developed after analyzing Lisbon's character traits and attractions, as well as the factors that were referenced as able to influence an individual's willingness to stay in Lisbon, and it is intended that the findings from this research will corroborate or refute that:

- I. Digital nomads intend to settle in Lisbon regardless of their visa.
- II. The visa for digital nomads is the beginning of the process of permanent stay in Lisbon.
- III. Lisbon's culture and community influence the willingness to settle in Lisbon in those who came with a visa and those without a visa.
- IV. The cost-of-living impacts digital nomads' willingness to stay in Lisbon.

4. Methodology

4.1. Approach

With the help of a questionnaire administered to the research sample, this exploratory study combined qualitative and quantitative methodology. It started with a quantitative analysis of survey data and progressed to a qualitative analysis of in-depth interviews. According to Rowley (2014), a questionnaire is a research technique composed of many questions presented in writing to individuals to learn about their opinions, beliefs, feelings, interests, expectations, and experiences. In this sense, the questionnaire was critical for investigating the variables stipulated to respond to this study's hypotheses and explore discoveries about digital nomads in Lisbon. The following independent and dependent variables were examined through the survey: Willingness to Stay; Visa no Visa; Community attachment; Cost-benefit.

In addition to analyzing the study's variables and investigating the intention of the digital nomads to remain in Lisbon permanently, the survey questions were established to characterize the study's sample. The questionnaire included open and closed questions throughout this perspective, as this research focuses on quantitative and qualitative.

O'Cathain and Thomas (2004) claim that open questions allow unlimited freedom of answers to the informant. The respondent's language may be used in them. They have the advantage of not being influenced by the answers pre-established by the researcher, as the informant will write whatever comes to mind. A barrier to open questions is also found in the fact that there is freedom of writing: the informant will have to have writing, formatting, and reasoning skills.

On the other hand, closed questions will generate specific options for the informant to choose from. The stipulation of response options adversely influences the interrogator's ability to express himself. They can be heterogeneous or only dichotomous. A broad question can elicit responses to many different aspects of reality. The questions can include information about facts, attitudes, behaviors, feelings, action patterns, current or past behavior, and so on, according to Chaer et al. (2012).

On top of data gathered from the selected sample, research was conducted using textual analysis of online material to draw on established non-academic information and semi-structured in-depth interviews to verify and further explore online-based information through the cohesive narrative of individual experiences – both methods linked to and suitable for interpretive constructivist approaches (Angen, 2000).

Initially, research was conducted on the profile of digital nomads on websites, videos, newspapers, and blogs using the "Google" search tool, which led to subsequent websites.

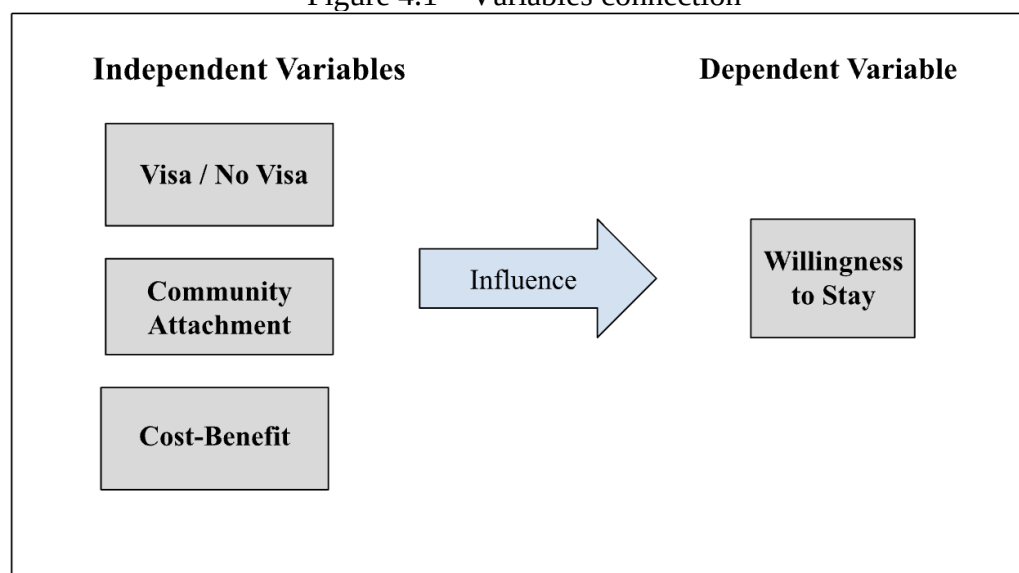
Sequentially, the previously mentioned variables were defined, as well as how each one would be examined via the questions developed. The results were analyzed using fsQCA, Partial Least Squares (PLS), and vertical reading of the most frequently mentioned points by the digital nomads who participated in the study and answered the questions. By applying fsQCA, it was analyzed that the possible combinations of the independent variables are equifinal, leading to a willingness to stay in Lisbon (dependent variable).

4.2. Variables and measurement

To determine whether digital nomads intend to relocate permanently to Lisbon, independent and dependent variables were developed to be examined along with the data collection process.

This study's primary and dependent variable is the intention to reside in Lisbon permanently, and independent variables were established to confirm or refute whether additional factors had any bearing on the digital nomads' final decision. As independent variables that might or might not have an impact on the willingness to stay in Lisbon, this study analyzed having or not having the digital nomad visa (Visa/No Visa), being connected to the Portuguese culture and community (Community Attachment); and, finally, considering the cost of living in Lisbon relative to the city's positive attributes (Cost-Benefit).

Figure 4.1 – Variables connection



Source: Author's elaboration (2023)

4.2.1. Determinant variables

The motivation for researching and gathering information about digital nomads in Lisbon and identifying whether they want to settle in the city stemmed from various factors. First, there are issues with accommodation and the high cost of rental apartments and houses in Lisbon. In a

quick online search on the current state of real estate speculation in Lisbon, it is possible to see that the current rental price and lack of available accommodation are challenging for the Portuguese government and society. The leasing issue in Lisbon is, however, being attributed to a wide range of factors, such as inflation, the rise of immigrants, and tourist accommodations, including the growing number of digital nomads in the country, along with other factors. When searching for "Rent"; "Lisbon"; "Digital Nomads"; using the search engine Google on February 21, 2023, the examples are presented in Table 4.2, as follows.

Table 4.1 – News' list in Portugal

Website	Title	Publish Date
Expresso 50	Younger people are disappointed with the new housing measures: "None of them combats the real problems we are experiencing today"	20th of February 2023
Executive Digest Sapo	Digital nomads double in Lisbon and Porto. Real estate investment changes student offer for these professionals	10th of October 2022
Idealist	Houses for digital nomads: startup offers furnished apartments for monthly stays	8th of October 2022
Observador	Non-habitual residents and digital nomads for dummies	26th of November 2022
Público	It is more difficult to rent a house in Lisbon than to be a member of the Government	24th of January 2023
Idealist	High demand and low supply drive home rents	16th of February 2023

Source: Author's elaboration (2023)

The complexities of the housing problem in Lisbon are currently one of the most contentious difficulties in the country. In this light, this study aims to better understand the willingness to stay of digital nomads in Lisbon, as this group is frequently mentioned as one of the factors contributing to the city's housing shortage. It is presumed from this research that by understanding this segment of individuals who currently reside in Lisbon and whether they intend to build their lives there, future investigations into the city's current rental challenges will be aided.

Another factor considered when analyzing the dependent variable was the following qualitative study by Thompson (2019), in which the author investigated community formation and the equilibrium between leisure and work among digital nomads. The author interviewed 30 digital nomads who attended conferences for digital nomads in Lisbon, Javea, Spain, and Berlin, Germany. Thompson (2019) suggests conducting thorough further research on specific locations to determine whether this lifestyle is temporary, considering the challenges of

constant mobility force them to adopt more traditional lifestyles (rent, visa, documentation, taxes, insurance, and so on).

In her master's thesis research on the "sense of place" of digital nomads in Lisbon, Beaumont (2019) found that the sense of belonging, identity, and attachment to the community might lead digital nomads to settle permanently in Lisbon. Beaumont sees this as an opportunity for further study into this potential scenario, thus contributing to this paper's definition of the willingness to stay as a dependent variable. Beaumont's research also followed the recommendation of Thompson (2018) when focusing on Lisbon as the place for deep investigation.

Silva and Silva (2021), in a mixed-method study on the willingness to stay of tourism lifestyle entrepreneurs, discussed how place attachment is a crucial factor in all routes leading to a strong desire to remain. This outcome supports the notion that the environment strongly influences location decisions. However, according to the authors, this factor alone is insufficient to fully explain the willingness to stay and must be combined with other factors.

Associating the place attachment with its community, the community attachment will be examined in this research as an independent variable. Residents' intention and willingness to support and sacrifice for the common good are reflected in their community attachment (Macias & Williams, 2016). Residents who develop a stronger attachment to their community show more concern and care for its environmental problems and become more aware of community-related environmental issues (Brehm et al., 2013).

The community is not the only physical aspect of an environment; there are also social, psychological, and spiritual aspects. Referring to a resident's sense of belonging or commitment to their community (Pradhananga & Davenport, 2017), community attachment is defined as an emotional connection and residents' perceptions that the community can and is meeting the needs of its members (Crowe, 2010).

Another independent variable in this study is whether the digital nomads have the "Digital Nomad" visa to establish themselves in the Portuguese capital. This variable seeks to investigate the willingness to stay off digital nomads that are not members of the European Union and Schengen countries, as these nations do not require a visa to live and work in Portugal. The visa for digital nomads is an opening for immigration to Portugal for those digital nomads from other countries who need it to live and work there. The digital nomad visa, which was added as one of the many amendments planned for Law No. 18/2022 of August 25, 2022 (Law N.º 18/2022, 2022) allows the holder to reside in Portugal with the intention of working remotely for a person or business with a residence or headquarters outside the country.

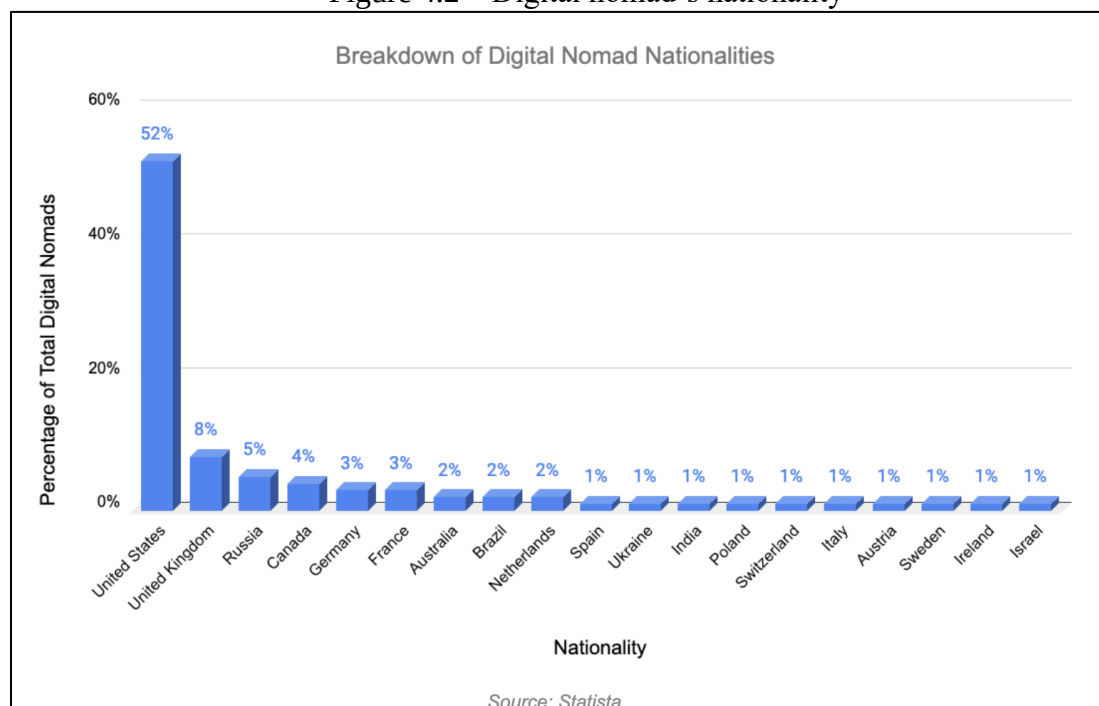
Since the visa was launched, more than 200 applications have been requested, most of them from Brazilians, according to SEF (Foreign Service and Borders) data made available on January 18, 2023, by the website “Public” (Monteiro, 2023). In an interview with the Brazilian magazine “Veja” (Firpo, 2023), a lawyer and specialist in immigration to Portugal, Flávia Souza, explained that the main interest of Brazilians in obtaining this visa is to acquire a residence permit, which allows foreigners to live longer in Portugal.

The third independent variable is the cost of living in Lisbon concerning benefits, referred to as “Cost-benefit”. The goal is to determine whether the cost of living in Lisbon, compared to the incoming digital nomads, is or not one of the factors preventing or motivating their willingness to stay in the Portuguese capital.

According to the authorization for working conditions in Portugal (ACT), the monthly minimum wage is currently 760 euros in 2023, approximately 11.000 euros annually (Portal ACT, 2023). The National Institute of Statistics of Portugal (INP) found that the average monthly wage in Portugal increased by 4.0% in the third quarter of 2022, compared to the same period in 2021, to 1,353 Euros (Statistics Portugal, 2022). Even though the average monthly wage is higher than the national minimum wage, annual earnings are less than 20,000 euros. The economic aspects will not be thoroughly examined in this study; however, it is necessary to comprehend and compare the values that a digital nomad can achieve. Following the most recent rate set by the Bank of Portugal when this study was conducted, in the first quarter of 2023, one euro equals approximately 1,06640 US dollars (Conversor De Moeda | Banco De Portugal, 2023).

According to a 2022 survey conducted with 901 American digital nomads, one in every five earns between 50,000 and 99,999 American dollars annually (MBO Partners, 2023). The nomad population is diverse, according to 2023 digital nomad trends in a survey responded to by 19.214 participants (Statista, 2023). The United States accounts for 52% of all digital nomads, with the United Kingdom (8%), Russia (5%), Canada (4%), Germany (3%), and France (3%) following (Statista, 2023).

Figure 4.2 – Digital nomad's nationality



Source: Author's elaboration (2023)

Brazilians, Americans, and British are also on the list of digital nomads who have already requested a digital nomad visa to temporarily settle in Lisbon (Monteiro, 2023).

4.2.2 Measurement

The application of the applied questionnaire divided the questions by the variables to be explored to analyze the data provided by the participants of this research. The following open-ended questions were initially used to gauge participant profiles and sample characteristics:

- Identification Questions:
 1. How old are you?
 2. Where are you from?
 3. How long are you in Lisbon?
 4. How do you identify yourself (Gender)?
 5. What is your professional classification?

Follow-up open-ended questions were applied to explore the characteristics that the group of interviewees believed to be a part of the profile of digital nomads and their motivations to choose Lisbon as their destination. The questions were designed to give participants the freedom to describe and highlight aspects unique to each participant, thereby contributing to a vertical reading of the main points mentioned after receiving the answers.

- Characterization Questions:

1. What is your previous professional experience?
2. What is your previous experience as a digital nomad?
3. Why did you decide to relocate to Lisbon?

The following closed questions attempted to initially understand and separate the sample between those who consider this lifestyle temporary or long-term and separate the participants into those who have and those who do not have the visa. This closed question accepted the binary responses "Yes" or "No." Those who responded that they held the visa received an additional question.

- Target Questions:
 1. Do you consider your current lifestyle as temporary or long-term?
 2. Do you have a Digital Nomad visa?

Questions were asked using seven-point Likert-type scales with anchors ranging from one (strongly disagree) to seven (strongly agree) after the group was divided into those who have and those who do not have visas. The Visa or No Visa question was only applicable to those who had answered “Yes” to the previous binary question:

- (WS) Willingness to stay: (1 = strongly disagree; 7 = strongly agree)
 - (WS1) I would like to stay indefinitely in Lisbon.
 - (WS2) I wish to follow the future development in Lisbon.
 - (WS3) Lisbon plays an important role in my future plans.
 - (WS4) My personal future is connected to Lisbon.
 - (WS5) I'm not looking for a place to live indefinitely right now.
- (CA) Community attachment: (1 = strongly disagree; 7 = strongly agree)
 - (CA1) My friends live in or near Lisbon.
 - (CA2) I made new friends in Lisbon.
 - (CA3) My friends will settle down in Lisbon.
 - (CA4) I have family members in Lisbon.
 - (CA5) I identify with the local community lifestyle.
- (CB) Cost Benefit: (1 = strongly disagree; 7 = strongly agree)
 - (CB1) The cost of living in Lisbon is attractive for my stay in the city.
 - (CB2) Lisbon has a better living cost than other destinations where I could live.
 - (CB3) I consider Lisbon an expensive city to live in.
 - (CB4) In Lisbon, I have a good quality of life.
 - (CB5) The cost of living in Lisbon is not a concern.
 - (CB6) If the cost of living were lower, I would live in Lisbon indefinitely.

- **(VISA)** Visa no Visa: (1 = strongly disagree; 7 = strongly agree)
 - **(VISA1)** The visa was decisive in the choice of Lisbon as a destination.
 - **(VISA2)** I intend to renew my visa or apply for another visa to stay in Lisbon.
 - **(VISA3)** I was coming to live in Lisbon regardless of the digital nomad visa.
 - **(VISA4)** The ease of obtaining a visa was decisive in my decision to come to Lisbon.

The survey was initially tested on two individuals to assess the logical structure of the questions, long ability, and comprehension of the content inquired.

4.3. Sample frame

The sample frame in this study focuses on digital nomads in Lisbon. One of the difficulties of this study was locating official data from the Portuguese government indicating the number of digital nomads currently present in the country. Although it was announced that approximately 200 visas for digital nomads were issued in two months (Monteiro, 2023), citizens in the European Union and Schengen countries do not require a visa to work and live in Portugal; thus, the current population of digital nomads in Portugal, and particularly in Lisbon, is unknown.

The online platform Nomadlist, a barometer of the digital nomad movement, currently shows 13,800 digital nomads in Lisbon in 2023. Although it aids in estimating the number of digital nomads in Lisbon, it is not overall trustable since the platform does not display the number of accounts that are regularly active in real time. Furthermore, it is necessary to consider that there is a representation of digital nomads who haven't enrolled on this platform.

The results of this research were obtained from a non-probability sample of 35 digital nomads who currently reside in the city of Lisbon. It was carried out using self-selection sampling, in which the researcher specified the inclusion and exclusion requirements in the digital nomad's criteria and the participants decided to answer the questionnaire based on their free will, in conjunction with snowball sampling, in which existing participants recruited future participants from others they know (Elfil et al., 2017; Shorten et al., 2014).

It is important to emphasize that traveling and using technology while on travel do not qualify as being a digital nomad to identify the participants in this study. It requires carrying out online professional activities and tasks while on the road to be considered a digital nomad; this can be considered the common aspect of all digital nomads' definitions by academic studies in this field. In this sense, those who were “backpackers” or “flashpackers” (Richards, 2015) were not accepted as participants in this study.

Flashpackers use technology to stay connected and share experiences via digital channels such as blogs, videos, and social media sites. Their physical mobility and online/virtual connectivity are linked (Hannam et al., 2014) since their travel experience produces content for their social media. Flashpackers and digital nomads coexist since they also share their travel experiences online (Hannam et al., 2014; Hannonen, 2020). The digital nomad, on the other hand, has a remote occupation that consists of providing a service, whether for a company or an end customer, which, because it is completely online, allows them to perform it from anywhere. As for the backpacker, Hannonen (2020) discusses the backpacker as a person who travels for leisure or lifestyle reasons without needing to work or being ready to work on any job to support their daily lives.

5. Results

5.1. Sample identification and classification

After the questionnaire was submitted, 35 responses were collected. The identification questions made it possible to determine that 54.3% of participants identified as male, 34.3% as female, 8.6% as non-binary, and 2.9% preferred not to say. Despite the absence of participants from Oceania and Africa, 13 countries participated in the research, which is one of the sample's biggest strengths. It is worthy to note that more than 60% of the sample are non-Europeans.

With the oldest participant being 45 years old and the youngest being 26, most participants were between 29 (14.3%) and 33 (20%), with an average participant age of 33. The information table below (Table 5.1) presents the number of participants by country and the average age of the participants. Because digital nomads' average ages fluctuate regardless of their country of origin, it endorses that most of them in Lisbon belong to Generation Y.

Table 5.1 - Nationalities and Age

Nationalities	Number of participants	Average age by nationality
Albania	1	29
Mexico	1	29
England	4	30
Argentina	2	31
Canada	2	31
Brazil	7	32
Ireland	1	33
Latvia	1	33
Portugal	3	33
United States	7	33
Scotland	1	35
Germany	3	37
Israel	2	43
Total	35	33

Source: Author's elaboration (2023)

Subsequently reviewing the data collected during the sample identification questions, the following information was gathered concerning everyone's current period of stay in Lisbon. Twenty out of the 35 participants have lived in Lisbon for a year or longer, which represents 57% of the total sample, while 15 have spent between one and seven months in Lisbon.

Figure 5.1 – Length of stay in Lisbon in months



Source: Author's elaboration (2023)

Regarding subsequent experiences as digital nomads, participants primarily informed the countries where they lived as digital nomads. However, some also specified other professional occupations while living the nomad life. Seven participants indicated that this was their first time traveling as a digital nomad, of which two have lived in Lisbon for over a year, and the remaining five have been here for less than 12 months. Overall, 60% of the sample had previous experiences as digital nomads in different places.

It was possible to determine that most participants currently or previously worked in information technology. Each participant could have nominated more than one profession; therefore, the corresponding table below (Table 5.2) were determined relative to the participants' professional experience. It was acknowledged 40 different occupations. The more specific classifications, such as "Mobile Developer" or "Desktop Developer", were combined into one single profession, with "Developer" being represented as "Developer (all)"; the same applies to the more specific IT and technology jobs, such as "IT Technician" or "Tester", which are both represented as "Information and Technology (all)". The survey found 21 information and technology professions suggested out of 40.

Table 5.2 - List of professions and industry field

Professions	Education	Finance	IT	Marketing	Others	Service Industry (all)	Total
Photographer					2		2
Customer Service						4	4
Data Analyst			1				1
Designer					1		1
Developer (all)			4				4
Digital Marketing				4			4
Finance Associate		3					3
Information and Technologies (all)			3				3
Product Manager			4				4
Sales						2	2
Software Engineer			4				4
Student	2						2
System Administrator			3				3
Teacher	1						1
UX Design			2				2
Total overall	3	3	12	4	3	6	40

Source: Author's elaboration (2023)

The climate and location elements, along with the quality of life in Lisbon, were most prominently highlighted in this section of the survey of the reasons that motivated the individuals to choose Lisbon as their destination; this connotation is evident in the instances below:

- i. Participant 1: “It is a very popular destination, and I produce a lot of online content about Lisbon, also the nice weather and quality of life, beach and food”.
- ii. Participant 2: “I like surfing, and in Portugal I can do it every day if I want to, Cascais is very close to Lisbon and good for surfing, also for travel and easy access to the center of the city”.
- iii. Participant 3: “Experience a new country with good sunny days, Lisbon offers nice events, festivals, activities, good food and wine”.

Finally, the closed-ended responses around the Digital Nomad visa and whether this lifestyle is temporary or long-term revealed that 60% of participants (21) claimed this lifestyle was long-term, and 40% (14) considered it temporary. Since responses were gathered from participants of all genders and different nationalities for both the temporary and long-term lifestyle, the outcome did not reveal trends based on gender, nationality, or age. On the other

hand, there was a clear majority in terms of nationality among the eight participants who stated that they had a visa, with six being North Americans (Canada and the United States).

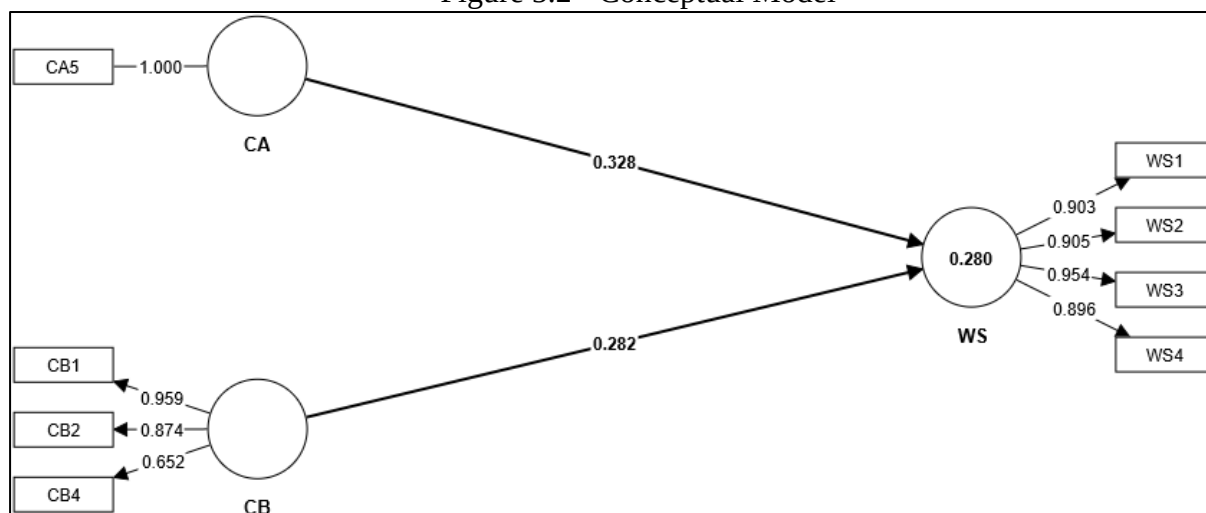
5.2. Statistical analysis

5.2.1. Quantitative analysis

Structured equation modeling (SEM) was employed to test the conceptual model. In particular, the SmartPLS 3 software was used to perform Partial Least Squares (PLS), a variance-based structural equation modeling technique (Ringle et al., 2015). The examination and comprehension of the findings were carried out in two phases. The first assessed the measurement model's reliability and validity before moving on to the structural model.

Individual indicators of reliability, as well as convergent validity, internal consistency reliability, and discriminant validity, were examined to assess the quality of the measurement model (Hair et al., 2017). The standardized factor loadings of CA5, CB1, 2, and 4, and WS1, 2, 3, and 4, were greater than 0.6 (with a minimum value of 0.65). All of them were significant at $p < 0.001$, supplying confirmation for individual indicator reliability (Hair et al., 2017).

Figure 5.2 - Conceptual Model



Source: Author's elaboration (2023)

Internal consistency reliability was confirmed because all the constructs' Cronbach alphas and composite reliability (CR) values surpassed the cut-off of 0.7 (table 5.3) (Hair et al., 2017).

The convergence of validity was also confirmed for three main factors. As previously mentioned, the items mentioned below filled positively and significantly on their respective constructs. Furthermore, every construct had a CR value that was higher than 0.70. Lastly, as shown in Table 5.3, the average of the variance extracted (AVE) for all constructs exceeded the 0.50 threshold (Bagozzi & Yi, 1988).

Two methods were used to assess discriminant validity. Started with the Fornell and Larcker criterion. This criterion demands a construct's square root of AVE (shown in bold on the diagonal in Table 5.3) be greater than its strongest correlation with any other construct (Fornell & Larcker, 1981). This requirement is fulfilled by all constructs represented in Table 5.3. The second criterion we used was the heterotrait-monotrait ratio (HTMT) (Hair et al., 2017; Henseler et al., 2015). All HTMT ratios were less than the more conservative threshold of 0.83 (Hair et al., 2017; Henseler et al., 2015). They add to the evidence of discriminant validity. Table 5.3 below shows the in bold square roots of AVE.

Below the diagonal elements are the correlations between the constructs. Above the diagonal elements are the HTMT ratios.

Table 5.3 - Trust Table

Latent Variables	(α) Cronbach Alpha	(CR) Composite reliability	(AVE) Average variance extracted.	1	2	3
(CB) Cost-Benefit	0,791	0,874	0,703	0,502	0,834	0,459
(WS) Willingness to Stay	0,935	0,953	0,833	0,469	0,446	0,915

Source: Author's elaboration (2023)

5.2.2. Quantitative results

The findings in Table 5.4 demonstrate that community attachment has a positive effect on Willingness to stay ($\beta = 0.328$ $p < 0.05$) while the cost-benefit is the opposite ($\beta = 0.282$, n.s.). Thus, the results support hypotheses 1 and 2 and invalidate hypothesis 4.

Table 5.4 - Path coefficients

Path	(β)Path Coefficients	(STDEV) Standard deviation	(O/STDEV) T statistics	P values
Community Attachment > Willingness to Stay	0,328	0,156	2,104	0,035
Cost-Benefit > Willingness to Stay	0,282	0,171	1,646	0,100

Source: Author's elaboration (2023)

5.2.3. Qualitative analysis

The fuzzy set qualitative comparative analysis (fsQCA) method was employed to perform an empirical assessment in the present investigation. FsQCA is presented by Misangyi et al. (2017), a set-theoretic analytical technique that allows for extremely fine empirical analysis of causal complexity through the logic of the set theory, equifinality to permit various equally effective configurations of conditions that can end up resulting in the same outcome, and

asymmetric correlation to permit configurations that result in an outcome that distinct from the arrangements, leading to the rejection of it.

FsQCA is based on the concept of set membership. To analyze data in fsQCA, the original variables must be transformed into fuzzy sets (i.e., a set of membership scores ranging from zero (complete exclusion from a set) to one (complete inclusion)) (Ragin, 2014); this procedure is defined as calibration and requires the specification of three different anchors: one to define full membership, another to define full non-membership, and a cross-over point (Ragin, 2014). Following the structure of Woodside's (2013) research, three values were used to define these anchors: full membership was set at the original value that covered 95% of the data values, the cross-over point was set at the original value that covered 50% of the values, and full non-membership was set at the original value that covered 5% of the values.

5.2.3.1. Analysis of Sufficient Conditions for Willingness to Stay

The causal condition or combination of conditions is sufficient for the outcome if it happens when the condition (or combination of conditions) is present (Rihoux et al., 2009, p. 184). Three sequential steps were used to analyze sufficiency (Ragin, 2014; Fiss, 2011). A truth table was initially developed (table 5.5), containing all rational combinations of the three conditions and the corresponding number of empirical instances. In the following step, the truth table was condensed into essential configurations using two parameters: consistency and frequency, which both referred to “the degree to which cases correspond to the set-theoretic relationships expressed in a solution” (Fiss, 2011, p. 402). Often explained as the number of experimental instances for each possible combination.

Only configurations with at least five best-fit cases were retained because the minimum frequency threshold was set at five (Rihoux et al., 2009, p.107). The lowest acceptable consistency score was set at 0.8 (Ragin, 2014), a measure of consistency. To avert concurrent subset relations of attribute combinations in both the outcome and the negation, the proportional reduction in inconsistency (PRI) was also examined, and eliminated any configuration that had a PRI lower than or equal to 0.7 (Fiss, 2011; Schneider, 2012). The truth table was finally condensed into simpler configurations using the Quine-McCluskey algorithm (Ragin, 2014) and Boolean minimization.

Counterfactual analysis, which distinguishes between simple and complex counterfactuals, is incorporated into the Quine-McCluskey algorithm (Fiss, 2011, p. 403). The truth table algorithm generated three possible outcomes (complex, intermediate, and parsimonious) that reflect the differences between these two types of counterfactuals; this makes it possible to

categorize antecedent conditions as “core” or “peripheral” (Fiss, 2011). As a result, the fuzzy-set intermediate solution for both outcomes (high and low willingness to stay) was provided, as well as a distinction between “core” and “peripheral” conditions (Fiss, 2011). The following table displays the fuzzy set intermediate solution for high and low willingness to stay.

Table 5.5 - Solutions for high and low willingness to stay

	High Willingness to Stay (ws)			Low Willingness to Stay (~ws)
Solution	S1	S2	S3	S4
Community Attachment	●		⊗	
Cost Benefit		●	⊗	⊗
Visa no Visa	⊗	⊗	●	●
Consistency	0.80	0.80	0.81	0.93
Raw Coverage	0.65	0.55	0.87	0.14
Unique Coverage	0.14	0.03	0.08	0.14
Overall solution consistency				0.77
Overall solution coverage				0.93

Source: Author’s elaboration (2023)

5.2.4. Qualitative results

Consistency and coverage are two criteria that must be met for a solution to be deemed valid; these criteria were applied using the formulas proposed by Ragin (2014) and Corne and Peypoch (2020). The degree to which empirical cases that share a configuration agree in displaying the result is described by the consistency value of each configuration. The table lists the corresponding values for each solution (S). All solutions' consistency scores exceeded the cutoff point 0.8 (Ragin, 2014). Therefore, all solutions could be deemed adequate for high willingness to stay (WS). Coverage evaluates the fraction of circumstances that take a specific route and encapsulates the configuration's empirical significance (Ragin, 2014). Unique coverage is the proportion of cases that can only be explained by one configuration. Table 5.5 demonstrates that all solutions' unique coverage was greater than zero. As a result, all solutions had practical relevance.

The outcomes show that the visa was present in all solutions, even as a low indicator. The first solution (S1) demonstrates that a low visa/ no visa and a high level of community attachment can result in a high willingness to stay, regardless of the cost-benefit. The second

solution (S2) indicates that a high cost-benefit combined with a low visa/no visa also results in a high willingness to stay. Finally, in the high-ws solutions, the third solution (S3) demonstrates the combination of high visa no-visa with low cost-benefit and community attachment.

As fsQCA considers, causal asymmetry, which translates to solutions that predict a high willingness to stay, may not always be the opposite of configurations that predict a low willingness to stay (Fiss, 2011). Therefore, this result also represents factors contributing to a low willingness to stay ($\sim$ ws). The sufficiency analysis for the outcome of ws used the same frequency, consistency, and PRI thresholds as those used for a high willingness to stay. The fuzzy set intermediate solution for low willingness to stay is shown in Table 5.5, with the fourth and final solution (S4) demonstrating that for those who have a visa, combined with low cost-benefits, leads to a low willingness to stay.

6. Discussion

6.1. Community attachment

As expected, according to hypotheses 1 and 3 previously established, the results indicate that community attachment directly influences the willingness to say, and this confirmation was reaffirmed with the sample of digital nomads that participated in this research. Social ties, a sense of belonging, place-based identity, quality of life, and economic factors are a few of the significant factors that researchers have identified as influencing community attachment (Hidalgo & Hernandez, 2001; McCool & Martin, 1994).

In this perspective, this research confirms this position claimed by academics since the quality of life was one of the positive points most pointed out by digital nomads when asked about their motivation for choosing Lisbon. Reichenberger (2018) stems from the fact that when digital nomads choose a destination, they consider the structures of the destinations to accommodate them, for example, offering coworking and co-living style accommodations. This can also be associated with keeping in touch with the community of digital nomads that live in these places, which will strengthen local connection ties, and which we can see also has a great impact on community attachment and these are aspects that Lisbon offers.

It is important to mention that this variable showed, in the quantitative results, to have a direct influence on the willingness to say decision-making, regardless of the other variables, while in the qualitative results it had an influence even when combined with the other variables, therefore, it is of great influence on decision making for digital nomads to stay in Lisbon.

6.2. Cost-benefit

The cost of living compared to the benefits of living in Lisbon, however, proved not to be a relevant factor in the willingness to say, according to the quantitative results refuting hypothesis number 4. Although it has an influence when combined with the other variables, solutions 3 and 4 in the qualitative results show high and low willingness to say, respectively.

Patwardhan et al. (2020) discussed that affordability also plays an important role in community attachment and consequently in willingness to say, therefore having the results obtained going in accordance with this confirmation. However, it was possible to note and contribute to the academy that this variable can only influence when combined with other factors, for example, the community attachment and the legal visa of the digital nomad in the country.

Additionally, in line with data from Statista (2023), which shows that the majority of digital nomads globally are from the USA, the sample of this research shows the Americans being one

of the two nationalities that most participated in this research and that as the data shows of the MBO Partners website in 2023, this group presents annual income between 50,000 and 99,999 dollars per year, a value considerably higher than the average annual earnings of a Portuguese person. It is, therefore, understandable and explains how the cost of living is not directly influential in willingness to stay since a good part of the sample is from a nationality known for high income as digital nomads.

Furthermore, most of the participants are from the Information and Technology sector, an industry in which Lisbon is investing in attracting professionals, and it is known for its high incomes compared to other sectors.

6.3. *Visa no visa*

The quantitative analyses show that having a visa for digital nomads or not has no direct influence on digital nomads' willingness to stay; however, the qualitative data show that low visa no visa when combined with high community attachment (S1) or Cost Benefit (S2) has a strong influence on their willingness to stay. It was also possible to notice in the results for low willingness to stay that those who have the visa combined with a low cost-benefit will have a low willingness to stay (S4). It is understood here that for those with a visa, other aspects would lead these digital nomads to decide to stay permanently in Lisbon. Not having a visa is not directly associated with a contrary position.

As previously stated in this study, the Visa for Digital Nomads was launched in 2022. Thus, there were no other academic studies on this visa when this study was conducted. It is expected to contribute to the academy, primarily to studies of social policies and demography in Lisbon, in the sense that providing an opportunity for digital nomads who want to stay in Lisbon is not a decisive factor when making this decision because other variables must be considered.

7. Conclusion

7.1. Theoretical contributions

Silva and Silva (2021), in a study on willingness to stay, concluded that different factors influence individuals to make such a decision. The statement of this presented study was identified and aligned with their research since it can be concluded that the same applies to digital nomads. The ties of connection and attachment to the place are fundamental factors; however, although the most striking, other aspects that generate the willingness to stay in Lisbon are aligned with the community attachment.

For digital nomads, Thompson (2018) suggested future research to understand whether the nomad lifestyle would be temporary or long-term and whether the destination itself was a decisive factor (Beaumont, 2019). In this research, it was possible to understand that for most digital nomads, this lifestyle is long-term and that, in the case of Lisbon, the quality and cost of living contribute to the coming of these individuals to the city, both for those with and without a visa for the digital nomad.

Furthermore, it demonstrated that most digital nomads are not Europeans, and most work in information technology. This highlights that Lisbon currently aims to draw a profile of people with high income to the city, and they will be part of the capital's demographic and socio-cultural scenario, although for a limited time.

7.2. Practical implications

The outcomes of the present research show that the variables studied do influence the willingness to stay of digital nomads in Lisbon, even if at different levels or when combined; however, it was also discovered that digital nomads tend to reside in the Portuguese capital for more than one year, even though many of them are temporary residents, as this lifestyle is, for the most part, is long-term. Considering that the Portuguese government seeks this population to continue residing in the capital, it is essential to ensure that support for events, celebrations, and other community-centered strategies are provided through which these individuals can connect with themselves and the local community.

Moreover, the digital nomad visa may be a gateway for non-Europeans to settle permanently in Portugal. It is intended to motivate the public and social leaders of the Portuguese capital to consider digital nomads in the hunt for housing in Lisbon, which is currently, as previously stated, a challenge due to both a lack of housing and a high cost.

The government of Lisbon could fully invest in policies for digital nomad houses of availabilities that do not negatively compromise the real estate sector and houses for the local

community. For example, limiting and restricting for investors and property owners where properties intended for digital nomads do not exceed the availability for the local community.

7.3. Limitations and future research

While highlighting potential areas for further research, this study also lists some limitations. Firstly, the inability to identify the total population of digital nomads in Portugal compared to this study sample. Although the government provides the number of visas for digital nomads issued, many are not required a visa as citizens of the Schengen area and, therefore, can reside and work in Portugal without it. Undoubtedly, the convenience sample could be expanded; however, in line with the first limitation presented, there was difficulty in finding digital nomads who considered themselves digital nomads to respond to the survey.

Secondly, many remote workers from multinational organizations with their corporate offices in Lisbon were identified; they aren't considered digital nomads. Nevertheless, they participate in digital nomad groups on social media and live in co-living spaces. This study's variables could be applied to this other group of professionals, consequently creating an opportunity for future research, and comparing the intentions of permanently staying in Lisbon of this other group.

A continuous investigation will be useful to comprehend the perceptions of the Lisbon community towards the digital nomads in the capital and the sociocultural effects of digital nomads in Lisbon. Finally, determine whether the results are limited to Lisbon or whether the circumstances differ in other large cities in Portugal, such as Porto and Funchal in Madeira, which are also popular destinations for digital nomads.

Reference List

- Aguilera, A. (2008). Business travel and mobile workers. *Transportation Research Part A-policy and Practice*, 42(8), 1109–1116. <https://doi.org/10.1016/j.tra.2008.03.005>
- Angen, M. (2000). Evaluating Interpretive Inquiry: Reviewing the Validity Debate and Opening the Dialogue. *Qualitative Health Research*, 10(3), 378–395. <https://doi.org/10.1177/104973230001000308>
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. <https://doi.org/10.1007/bf02723327>
- Beaumont, J. (2019). Digital nomads and sense of place: A case study of Lisbon. *Wageningen, Netherlands: Wageningen University*
- BenMoussa, C. (2003). Workers on the move: new opportunities through mobile commerce. *Stockholm mobility roundtable*, 22-23
- Brehm, J. M., Eisenhauer, B. W., & Stedman, R. C. (2013). Environmental Concern: Examining the Role of Place Meaning and Place Attachment. *Society & Natural Resources*, 26(5), 522–538. <https://doi.org/10.1080/08941920.2012.715726>
- Chaer, G., Diniz, R. P., & Ribeiro, E. F. (2012). The questionnaire technique in educational research. *Evidence Magazine*, 7(7)
- Ciolfi, L., & De Carvalho, A. F. P. (2014). Work Practices, Nomadicity and the Mediatonal Role of Technology. *Computer Supported Cooperative Work*, 23(2), 119–136. <https://doi.org/10.1007/s10606-014-9201-6>
- Cocola-Gant, A., Gago, A. R. A., & Jover, J. (2020). Tourism, Gentrification and Neighbourhood Change: An Analytical Framework– Reflections from Southern European Cities. In *Emerald Publishing Limited eBooks* (pp. 121–135). Emerald (MCB UP). <https://doi.org/10.1108/978-1-83867-487-820201009>
- Corne, A., & Peypoch, N. (2020). On the determinants of tourism performance. *Annals of Tourism Research*, 85, 103057. <https://doi.org/10.1016/j.annals.2020.103057>
- Crowe, J. (2010). Community attachment and satisfaction: the role of a community's social network structure. *Journal of Community Psychology*, 38(5), 622–644. <https://doi.org/10.1002/jcop.20387>
- Da Cunha, A., Raposo, F., Filho, Á., Da Cunha, A., Raposo, F., & Filho, Á. (2023). Immigrants: SEF delays houses and new tents are born in the city. Is there a way for Lisbon to solve this housing crisis yet again? *Mensagem De Lisboa*. <https://amensagem.pt/2023/02/11/como-pode-lisboa-responder-crise-de-habitacao-imigrantes/>

- Daly, P., Dias, A. R. G., & Patuleia, M. (2020). The Impacts of Tourism on Cultural Identity on Lisbon Historic Neighbourhoods. *Journal of Ethnic and Cultural Studies*, 8(1), 1–25. <https://doi.org/10.29333/ejecs/516>
- De Carvalho, A. F. P., Ciolfi, L., & Gray, B. (2011). The Making of Nomadic Work. In *IGI Global eBooks* (pp. 381–396). IGI Global. <https://doi.org/10.4018/978-1-60960-042-6.ch025>
- Elfil, M., & Negida, A. (2017). Sampling methods in Clinical Research; an Educational Review. *Archives of Academic Emergency Medicine*, 5(1), e52
- Ens, N., Stein, M. K., & Blegind Jensen, T. (2018). Decent digital work: Technology affordances and constraints
- Firpo, M. (2023, February 17). Portugal: Brazilians lead the list of digital nomad visa applications. *VEJA*. <https://veja.abril.com.br/mundo/portugal-brasileiros-lideram-lista-de-pedidos-do-visto-de-nomade-digital>
- Fiss, P. C. (2011). Building Better Causal Theories: A Fuzzy Set Approach to Typologies in Organization Research. *Academy of Management Journal*, 54(2), 393–420. <https://doi.org/10.5465/amj.2011.60263120>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Forum, F. L., & Altringer, B. (2015, December 22). Globetrotting Digital Nomads: The Future Of Work Or Too Good To Be True? *Forbes*. <https://www.forbes.com/sites/forbesleadershipforum/2015/12/22/globetrotting-digital-nomads-the-future-of-work-or-too-good-to-be-true/#e6e2627594e3>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. <http://ci.nii.ac.jp/ncid/BB15179462>
- Hall, G., Sigala, M., Rentschler, R., & Boyle, S. M. (2019). Motivations, Mobility and Work Practices; The Conceptual Realities of Digital Nomads. In *Springer eBooks* (pp. 437–449). Springer Nature. https://doi.org/10.1007/978-3-030-05940-8_34
- Hannam, K., Butler, G., & Paris, C. M. (2014). Developments and key issues in tourism mobilities. *Annals of Tourism Research*, 44, 171–185. <https://doi.org/10.1016/j.annals.2013.09.010>
- Hannonen, O. (2020). In search of a digital nomad: defining the phenomenon. *Information Technology & Tourism*, 22(3), 335–353. <https://doi.org/10.1007/s40558-020-00177-z>

- Hemsley, J., Erickson, I., Jarrahi, M. H., & Karami, A. (2020). Digital nomads, coworking, and other expressions of mobile work on Twitter. *First Monday*.
<https://doi.org/10.5210/fm.v25i3.10246>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hidalgo, M., & Hernández, B. (2001). PLACE ATTACHMENT: CONCEPTUAL AND EMPIRICAL QUESTIONS. *Journal of Environmental Psychology*, 21(3), 273–281.
<https://doi.org/10.1006/jevp.2001.0221>
- Humphry, J. (2014). Officing: Mediating Time and the Professional Self in the Support of Nomadic Work. *Computer Supported Cooperative Work*, 23(2), 185–204.
<https://doi.org/10.1007/s10606-013-9197-3>
- Imobiliário, C. (2022). *Rents in Lisbon registered the highest quarterly increase in five years at 4.9%*. Confidencial Imobiliário.
<https://www.confidencialimobiliario.com/en/mercados/habitacao-arrendamento/rendas-em-lisboa-registam-o-maior-aumento-trimestral-em-cinco-anos-com-subida-de-4-9/>
- Karanasios, S., & Allen, D. T. (2014). Mobile technology in mobile work: contradictions and congruencies in activity systems. *European Journal of Information Systems*, 23(5), 529–542. <https://doi.org/10.1057/ejis.2014.20>
- Khatri, P., & Shukla, S. (2022). Digital Nomadism: A Systematic Review and Research Agenda. *SCMS Journal of Indian Management*, 19(3), 51-65
- Law n.º 18/2022. (2022). In *The Republic's Assembly* (No. 164). Republic Diary. Retrieved March 4, 2023, from <https://dre.pt/dre/home>.
- Lestegás, I., Seixas, J., & González, R. C. L. (2019). Commodifying Lisbon: A Study on the Spatial Concentration of Short-Term Rentals. *Social Sciences*, 8(2), 33.
<https://doi.org/10.3390/socsci8020033>
- Low, S. M., & Altman, I. (1992). Place attachment: A conceptual inquiry. *Human Behavior & Environment: Advances in Theory & Research*, 1–12
- Macias, T., & Williams, K. S. (2016). Know Your Neighbors, Save the Planet. *Environment and Behavior*, 48(3), 391–420. <https://doi.org/10.1177/0013916514540458>
- Makimoto, T., & Manners, D. (1997). *Digital nomad*. Wiley
- MBO Partners. (2023). *2022 Digital Nomads Report Shows 131% Growth Since 2019*.
<https://www.mbopartners.com/state-of-independence/digital-nomads/>

- Mark, G., & Su, N. M. (2010). Making infrastructure visible for nomadic work. *Pervasive and Mobile Computing*, 6(3), 312–323. <https://doi.org/10.1016/j.pmcj.2009.12.004>
- McCool, S. F., & Martin, S. (1994). Community Attachment and Attitudes Toward Tourism Development. *Journal of Travel Research*, 32(3), 29–34. <https://doi.org/10.1177/004728759403200305>
- McMillan, D. G., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14(1), 6–23. [https://doi.org/10.1002/1520-6629\(198601\)14:1](https://doi.org/10.1002/1520-6629(198601)14:1)
- Misangyi, V. F., Greckhamer, T., Furnari, S., Fiss, P. C., Crilly, D., & Aguilera, R. V. (2017). Embracing Causal Complexity. *Journal of Management*, 43(1), 255–282. <https://doi.org/10.1177/0149206316679252>
- Monteiro, R. (2023). Portugal issued “about 200 visas” to digital nomads in two and a half months. *PÚBLICO*. <https://www.publico.pt/2023/01/18/p3/noticia/portugal-emitiu-cerca-200-vistos-nomadas-digitais-dois-meses-meio-2035496>
- Nash, C., Jarrahi, M. H., & Sutherland, W. J. (2021). Nomadic work and location independence: The role of space in shaping the work of digital nomads. *Human Behavior and Emerging Technologies*, 3(2), 271–282. <https://doi.org/10.1002/hbe2.234>
- Nash, C., Jarrahi, M. H., Sutherland, W. J., & Phillips, G. (2018). Digital Nomads Beyond the Buzzword: Defining Digital Nomadic Work and Use of Digital Technologies. In *Springer eBooks* (pp. 207–217). Springer Nature. https://doi.org/10.1007/978-3-319-78105-1_25
- Nelson, S., Jarrahi, M. H., & Thomson, L. (2017). Mobility of knowledge work and affordances of digital technologies. *International Journal of Information Management*, 37(2), 54–62. <https://doi.org/10.1016/j.ijinfomgt.2016.11.008>
- O’Cathain, A., & Thomas, K. N. (2004). “Any other comments?” Open questions on questionnaires – a bane or a bonus to research? *BMC Medical Research Methodology*, 4(1). <https://doi.org/10.1186/1471-2288-4-25>
- Patwardhan, V., Ribeiro, M. A., Payini, V., Woosnam, K. M., Mallya, J., & Gopalakrishnan, P. (2020). Visitors’ Place Attachment and Destination Loyalty: Examining the Roles of Emotional Solidarity and Perceived Safety. *Journal of Travel Research*, 59(1), 3–21. <https://doi.org/10.1177/0047287518824157>
- Poder. (2021). Lisbon gains space as a European technology hub. *Poder360*. <https://www.poder360.com.br/internacional/lisboa-ganha-espaco-como-polo-europeu-de-tecnologia/>
- Portal ACT. (2023). <https://portal.act.gov.pt/Pages/Home.aspx>

- Pradhananga, A. K., & Davenport, M. A. (2017). Community attachment, beliefs and residents' civic engagement in stormwater management. *Landscape and Urban Planning*, 168, 1–8. <https://doi.org/10.1016/j.landurbplan.2017.10.001>
- Ragin, C. C. (2014). *Redesigning Social Inquiry: Fuzzy Sets and Beyond*. <http://ci.nii.ac.jp/ncid/BA87863338>
- Redação. (2023, March 16). Housing in Greater Lisbon: there are more than 23 thousand people waiting for a house. *Idealista/News*. <https://www.idealista.pt/news/imobiliario/habitacao/2023/03/16/57122-habitacao-na-grande-lisboa-ha-mais-de-23-mil-pessoas-a-espera-de-casa>
- Reichenberger, I. (2018). Digital nomads – a quest for holistic freedom in work and leisure. *Annals of Leisure Research*, 21(3), 364–380. <https://doi.org/10.1080/11745398.2017.1358098>
- Relph, E. (1997). Sense of place. *Ten geographic ideas that changed the world*, 205–226.
- Reviewer, N. L. (2022). *Lisbon for Digital Nomads*. Nomad List. <https://nomadlist.com/lisbon>
- Ribeiro, F. F., & Torkington, K. (2022). Conflicting discursive representations of overtourism in Lisbon in the Portuguese digital press. *International Journal of Tourism Cities*, 9(1), 286–301. <https://doi.org/10.1108/ijtc-05-2022-0108>
- Richards, G. (2015). The new global nomads: Youth travel in a globalizing world. *Tourism Recreation Research*, 40(3), 340–352. <https://doi.org/10.1080/02508281.2015.1075724>
- Rihoux, B. (2009). Qualitative Comparative Analysis (QCA) and Related Systematic Comparative Methods. *International Sociology*, 21(5), 679–706. <https://doi.org/10.1177/0268580906067836>
- Ringle, C. M., Wende, S., Will, A. (2015). SmartPLS3.0. Hamburg: www.smartpls.de
- Rowley, J. (2014). Designing and using research questionnaires. *Management Research Review*, 37(3), 308–330. <https://doi.org/10.1108/mrr-02-2013-0027>
- Silva, R. F., & Silva, G. M. (2021). Willingness to Stay of Tourism Lifestyle Entrepreneurs: A Configurational Perspective. *Sustainability*, 13(24), 13519. <https://doi.org/10.3390/su132413519>
- SchengenVisaInfo.com. (2022, November 15). *Portugal D7 Visa Requirements for Digital Nomads*. <https://www.schengenvisa.info/digital-nomad-visa/portugal/>
- Schneider, C., & Wagemann, C. (2012). Set-Theoretic Methods for the Social Sciences: A Guide to Qualitative Comparative Analysis. <http://ci.nii.ac.jp/ncid/BB10589525>
- Shorten, A., & Moorley, C. (2014). Selecting the sample. *Evidence-Based Nursing*, 17(2), 32–33. <https://doi.org/10.1136/eb-2014-101747>

- Song, Z., Daryanto, A., & Soopramanien, D. (2019). Place attachment, trust and mobility: Three-way interaction effect on urban residents' environmental citizenship behaviour. *Journal of Business Research*, 105, 168–177.
<https://doi.org/10.1016/j.jbusres.2019.08.001>
- Statista. (2023). *Nationalities of digital nomads worldwide 2023*.
<https://www.statista.com/statistics/1298849/digital-nomads-by-nationality-worldwide/>
- Statistics Portugal. (2022). *Average Monthly Gross Pay Per Employee*. Retrieved April 5, 2023, from www.ine.pt
- Stedman, R. C. (2002). Toward a Social Psychology of Place. *Environment and Behavior*, 34(5), 561–581. <https://doi.org/10.1177/0013916502034005001>
- Torkington, K., & Ribeiro, F. F. (2020). Whose right to the city? An analysis of the mediatized politics of place surrounding *alojamento local* issues in Lisbon and Porto. *Journal of Sustainable Tourism*, 30(5), 1060–1079.
<https://doi.org/10.1080/09669582.2020.1849230>
- Thompson, B. Y. (2018). Digital nomads: Employment in the online gig economy. *Glocalism: Journal of Culture, Politics and Innovation*, 1, 1-26
- Thompson, B. Y. (2019). The Digital Nomad Lifestyle: (Remote) Work/Leisure Balance, Privilege, and Constructed Community. *International Journal of the Sociology of Leisure*, 2(1–2), 27–42. <https://doi.org/10.1007/s41978-018-00030-y>
- Tuan, Y. F. (2013). Espaço e lugar: A perspectiva da experiência. *SciELO-EDUEL*