

The Urban Factors in Highly Skilled Migration Motivation: The Case of Turkish Professionals in the Netherlands

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Abstract

This study investigates the role of the “urban factor” in the location choice motivations of highly skilled individuals migrating from Türkiye to the Netherlands. Using a mixed-method approach, the research compares spatial (transportation, infrastructure, public facilities, spatial quality, cost of living) and non-spatial (economic, political, social, personal) factors affecting migration decisions, based on data collected from participants via online survey. The findings indicate that for highly skilled participants, spatial elements hold equal importance to economic and social reasons in their migration decisions. While contributing to discussions on talent migration and urban competitiveness, the study highlights the necessity of inclusive, liveable, and holistic planning policies for cities to attract human capital and facilitate integration processes.

Key words: Highly Skilled Migration, Urban Competitiveness, Locational Preferences

1. Introduction

In recent decades, international migration has undergone a profound transformation, increasingly characterized by the mobility of highly skilled individuals. Unlike traditional migration patterns, this new wave is not primarily driven by survival or displacement but rather by aspirations for professional development, creative autonomy, and integration into global knowledge economies. Highly skilled migrants—often associated with the creative class—are not only economic actors but also contributors to the cultural, social, and technological dynamism of cities. As such, their locational choices hold significant implications for urban planning, regional development, and national competitiveness.

Cities and regions are no longer passive recipients of global talent; they actively compete to attract and retain it. This competition has intensified in recent years due to demographic shifts, labour shortages in specialized sectors, and the increasing relevance of innovation-based growth. In this context, urban environments have become key arenas for global talent flows. Notably, the Netherlands has emerged as a prominent destination for highly skilled migrants, including an increasing number of professionals from Türkiye. This trend raises critical questions regarding the spatial and non-spatial factors that influence mobility decisions and shape urban experiences for this group.

This study aims to investigate the locational preferences and decision-making processes of highly skilled Turkish migrants in the Netherlands. It seeks to understand how spatial factors—such as infrastructure, transportation, environmental quality—interact with non-spatial determinants like social cohesion, administrative efficiency, safety, and cultural inclusivity to inform migration trajectories. Grounded in a mixed-methods research design and informed by theoretical frameworks, the research provides both conceptual clarity and empirical insight into the drivers and lived experiences of this increasingly mobile population.

By focusing on the Turkish case within the Dutch context, the study not only contributes to the broader literature on highly skilled migration and urban attractiveness but also addresses a critical gap in understanding the interplay between individual agency and structural urban conditions in migration decisions. Ultimately, it offers guidance for policymakers, planners, and scholars seeking to navigate the complex dynamics of global talent mobility in an era where cities must simultaneously be engines of economic growth and spaces of social inclusion.

2. Highly Skilled Migration: City, Economy, and Global Competition

In the contemporary era, highly skilled migration has emerged as a distinct form of mobility, differing notably from other types of migration. As a result, its definition, underlying motivations, and impacts also take on unique characteristics.

The new economic order that emerged from modern life and urbanization driven by capitalism was initially shaped by Fordist production models, which emphasized mass production and regular working conditions (Murphy & Redmond, 2009). Over time, however, knowledge-based economic systems began to replace traditional modes of production. Scott (2006) defines this transformation as an innovative economy composed of high technology, financial services, and cultural-artistic sectors.

In this context, Markusen (2006) and Florida (2012) emphasize that the creative class—characterized by highly educated, innovative, and mobile individuals—contributes significantly to the economic growth of cities. According to Florida (2012), the creative class is a fundamental driver of both economic and cultural development due to its problem-solving and creative thinking capacities. Similarly, Cedefop (2010) defines highly skilled individuals as well-educated and competent people specialized in particular sectors.

From this perspective, human capital, referring to the stock of knowledge, skills, and experience possessed by individuals, is of critical importance for innovation and productivity (Becker, 1964). Glaeser et al. (1995) argue that cities with higher levels of human capital experience faster growth, while Florida (2012) suggests that the creative class fuels urban economic dynamism and attracts investment and labor, thus supporting urban development. Florida's (2012) framework reinterprets the traditional human capital model, expanding it to include technology, art, culture, education, and managerial professions (Darchen & Tremblay, 2010). Moreover, highly skilled individuals not only contribute economically but also enhance social and cultural dynamism through active participation in urban life (Florida, 2012). Glaeser and Saiz (2003) note that cities with an educated population tend to have a higher quality of life and become more attractive, while Rodrik et al. (2004) highlight that these regions foster strong institutions that promote economic growth.

Cities function not only as economic hubs but also as cultural, political, and social centers where knowledge production, innovation, and creativity converge (Brown & Męczyński, 2010). Therefore, urban development is closely linked to dynamic production systems and work-life relations (Scott, 2006). The geographic clustering of knowledge-based economies enhances global economic networks and increases the competitiveness of cities on an international scale (Murphy & Redmond, 2009).

Global competition to attract highly skilled migrants is expected to become even more intense soon. The need for skilled talent is increasing not only in developed nations but also in rising economies. Consequently, the Netherlands is competing for talent not just with countries like the United States and Germany, but also with emerging players such as Brazil and Türkiye. This increased competition is often described in popular discourse as the 'battle for the brightest,' the 'brain race,' or the 'war for talent' (Berkhout, Heyma, Volkerink, & Werff, 2016).

Creative class members—highly skilled individuals—drive both cultural development and economic growth by producing knowledge-based content (Scott, 2006; Glaeser, 2005). They shape urban identity, boost investment appeal, and stimulate economic dynamism. Cities attracting such talent benefit from enhanced innovation, collaboration, and productivity. Florida (2012) terms these professionals "creative human capital," emphasizing their central role in the "new economy" and in fostering both economic and cultural progress (Murphy & Redmond, 2009). A city's ability to retain this group is essential for local development and is intertwined with global skilled migration dynamics. For developing countries, this often manifests as brain drain, leading to economic losses from unrecouped educational investments and sectoral labor shortages (Beine, Docquier & Rapoport, 2008; Lowell & Findlay, 2001). The departure of skilled labor undermines innovation, service quality, and competitiveness. Retaining creative talent is thus vital for economic vitality and socio-cultural sustainability (Glaeser & Saiz, 2003; Rodrik et al., 2004).

3. Defining Highly Skilled People

The definition of highly skilled individuals varies significantly depending on the context and purpose of classification. In political and administrative settings, lawmakers and institutions may define highly skilled persons based on salary thresholds or national policy needs. For instance, certain migration policies, such as the EU Blue Card system, identify a highly skilled migrant as someone earning at least 1.5 times the average national salary. However, this approach can exclude professionals engaged in high-level scientific research if their earnings fall below this threshold. Daniş (2023) highlights it and then illustrates this limitation by highlighting the case of a doctoral researcher at a European university who, despite working on an advanced research project, does not qualify as “highly skilled” due to income criteria.

In addition to income-based definitions, educational attainment serves as another fundamental criterion. According to the International Organization for Migration (IOM), a highly skilled person is generally defined as someone with at least two years of post-secondary education. Similarly, scholars such as Borjas (2005) and Cerna (2013) emphasize education and occupational status in their definitions. A common approach in the literature is to utilize occupational classifications. For example, Czaika and Parsons (2017) refer to the first three major groups of the International Standard Classification of Occupations (ISCO) to identify skilled professions. Likewise, visa regimes such as the U.S. H-1B and the EU Blue Card consider a combination of education, income, and occupation.

While education and income remain the most prevalent measures, some scholars have approached the concept from a broader socio-economic and cultural perspective. Mellander and Florida (2007), as cited in Dai, Zhou, Keane, and Huang (2012), categorize the concept of the “creative class” according to three criteria: educational level, income, and occupational sector. Florida (2012) defines this group as workers engaged in occupations rooted in creativity, innovation, and knowledge production. Their primary economic function is to generate new ideas, develop technology, and create content. This definition encompasses a wide spectrum of professions within both the creative and knowledge-based industries. The creative industries include fields such as advertising, architecture, fashion design, the arts, publishing, and media production, while the knowledge industries span ICT, finance, law, R&D, etc.

In parallel with Florida’s (2012) approach, other scholars have adopted a similarly inclusive framework. Clark, Lloyd, Wong, and Jain (2003) offer a comparable perspective, identifying the creative class as individuals contributing to the knowledge economy and cultural production. Their classification includes medical professionals, academic staff, financial analysts, consultants, legal professionals, and other experts in intellectually and creatively demanding sectors. These professions are further grouped into science, technology, education, business, cultural industries, and service/recreation. While the former are valued for their problem-solving and knowledge advancement, the latter—such as artists, designers, and writers—contribute to cultural vibrancy and enhance cities’ attractiveness through tourism and investment.

Howkins (2002) situates the creative class within the global creative economy, valuing original ideas, innovation, and design over physical goods. His definition spans advertising, architecture, media, R&D, education, and even law, where intellectual autonomy is central. Despite such frameworks, defining the highly skilled remains complex. Salt (1997) underscores conceptual and data-related challenges, proposing a typology that reflects group heterogeneity—covering professionals, managers, and technical experts. This model accounts for education levels, mobility patterns, and includes transferees, consultants, technicians, healthcare workers, etc.

4. Drivers of Highly Skilled Mobility

The creative class consists of individuals with innovative thinking, problem-solving abilities, and cultural production skills, characterized by high levels of education, a tendency toward independent work, and the capacity to integrate easily into diverse cultural environments and global labour markets (Florida, 2012). These individuals actively contribute to the economic and cultural development of cities by working in sectors that form the core dynamics of the knowledge economy, as mentioned. Therefore, the international mobility of highly skilled people holds strategic importance in today’s global economy. They tend to prefer locations where they can expand their

opportunities, express their freedoms, and further develop their skills.

In this context, studies on the factors influencing the settlement decisions of highly skilled migrants have been addressed at various levels and scopes. This study will examine these influencing factors under two main categories: spatial and non-spatial. Non-spatial factors include Florida's (2012) 3T model as well as personal trajectories as discussed by Liu and Shen (2014) and Chen and Rosenthal (2008), and Florida's (2012) soft factors. Spatial factors, on the other hand, will be evaluated under the categories of Florida's (2012) Hard Factors and Quality of Place, and urban amenities.

4.1. Non-Spatial Drivers of the Highly Skilled Mobility

Highly skilled individuals, often referred to as the creative class, are central to the economic and cultural development of cities through their capacity for innovative thinking and cultural production. These individuals form the backbone of the knowledge economy and are positioned at the core of global competition. Florida (2012) offers a comprehensive framework for understanding the factors that attract and retain this talent through his well-known "3Ts" model.

However, it is essential to recognize that individuals' migration decisions are not shaped solely by structural or economic factors. Different life stages and personal circumstances also play a critical role in shaping their mobility preferences. While young professionals often prioritize career prospects and urban dynamism, families and retirees tend to prefer locations that offer high living standards and quality public services (Liu & Shen, 2014; Chen & Rosenthal, 2008).

Soft factors—like cultural amenities, environmental quality—shape a city's identity and liveability. Though intangible, they significantly influence highly skilled migrants' location choices by enhancing lifestyle quality and fostering inclusive, vibrant urban environments that appeal to creative and talented individuals.

4.1.1. 3T Model of Florida

Among the conceptual frameworks proposed to understand the location choices of talented individuals, Florida's (2012) 3T model stands out as a pioneering approach. According to this model, the three fundamental pillars that attract highly skilled individuals are: Technology, Talent, and Tolerance.

The first component, Technology, refers to the infrastructure and institutional environment fostering innovation and technological advancement, including universities, research centres, and high-tech firms central to knowledge-based economies. Talent encompasses not only formally educated individuals but also those with creativity, problem-solving skills, and entrepreneurial potential (Florida, 2005). The third component, Tolerance, reflects a region's openness and receptivity to diverse lifestyles, cultures, and ideas. As Asheim and Hansen (2009) emphasize, regions that embrace diversity and encourage open dialogue offer a supportive environment for creativity and collaboration, attracting a more dynamic and skilled workforce.

Together, these three dimensions form a synergistic environment that enhances a city's or region's ability to compete in the global knowledge economy by appealing to highly mobile, skilled individuals.

4.1.2. Personal Trajectories

In addition, personal life trajectories significantly influence individual migration decisions. Life course theory emphasizes that age, life stage, family status, and career progression intersect with mobility preferences and constraints. For instance, Liu and Shen (2014) demonstrate that the preferences of older adults and retirees are often shaped by their search for high-quality services, healthcare, and environmental amenities. These groups tend to relocate to areas offering comfort, safety, and access to recreational opportunities.

Conversely, younger individuals in the early stages of their professional lives tend to be more mobile and responsive to economic opportunities and urban vibrancy. Chen and Rosenthal (2008) emphasize that young, single, and

highly educated individuals are more likely to migrate toward dynamic urban centres that offer career advancement, cultural richness, and social networks. In contrast, married individuals or those with children prioritize stability, access to quality education, and secure neighbourhoods.

Moreover, Whisler et al. (2008) classify university graduates into six different life stages and find that the relative importance of quality-of-life indicators, such as cultural amenities, urban infrastructure, and work-life balance, varies significantly across these groups. These findings highlight the necessity of understanding migration decisions as evolving processes shaped by both personal and contextual factors over time.

4.1.3. Soft Factors

A third group of non-spatial drivers, often termed soft factors, refers to the intangible and experiential elements that shape individuals' perceptions of places. These include lifestyle quality, cultural and artistic opportunities, environmental aesthetics, social diversity, and community tolerance (Florida, Mellander & Stolarick, 2008). Unlike hard infrastructure, these elements are less quantifiable yet profoundly influence locational attractiveness, particularly for the creative and highly skilled population (Asheim & Hansen, 2009).

Soft infrastructure refers to the cultural, social, and physical qualities shaping a city's identity and perceived liveability (Helbrecht, 2004). According to Murphy and Redmond (2009), Brown and Męczyński (2010), and Trip (2007), soft factors fall into three categories: cultural and recreational amenities (e.g., festivals, museums, cinemas, shopping centers, sports facilities); urban environmental conditions (e.g., cleanliness, noise and air pollution, waste management); and tolerance and openness toward minorities, immigrants, and diverse socioeconomic or sexual backgrounds. These factors significantly affect a city's liveability and its ability to attract and retain highly skilled migrants.

4.2. Spatial Drivers of the Highly Skilled Mobility

In the literature, it is emphasized that the migration decisions of highly skilled individuals are shaped not only by economic opportunities but also by the spatial characteristics of the places they reside in. In this context, the spatial factors influencing high-skilled migration are examined in this section under three main headings: "hard factors," "quality of place," and "urban amenities."

4.2.1. Hard Factors

Hard factors refer to tangible and measurable elements such as economic structure, transportation infrastructure, and access to healthcare and education. According to Florida (2012), leading components among these include employment opportunities, competitive wages, and robust infrastructure. Musterd and Gritsai (2013) note that while employment is the primary determinant for location choices among creative individuals in Europe, hard and soft factors are evaluated together. In this regard, quality of life elements are described as "the icing on the cake." Similarly, Sezgin (2021) emphasizes that although employment forms the basis of migration motivation, cultural diversity, urban aesthetics, and quality of life also influence decision-making processes.

Studies by Murphy and Redmond (2009), Brown and Męczyński (2010), and Trip (2007) classify hard factors under the following categories: public services, transportation infrastructure, and cost of living. Public services include street safety, police and healthcare services, and social security systems. Transportation infrastructure refers to public transit, intra- and inter-city connectivity, and bicycle lanes. Cost of living encompasses housing prices, basic consumer goods, leisure activities, and transportation expenses. These elements directly impact individuals' everyday experiences and strongly influence location choices.

According to Mash (2022), hard factors also cover broader economic and physical conditions. These include land and housing availability, taxes and subsidies, proximity to suppliers and clients, transportation access, the presence of a skilled workforce, and proximity to research institutions. Administrative flexibility and efficiency in bureaucratic procedures also play critical roles in decision-making processes. Collectively, these factors are particularly important for investors and creative professionals.

4.2.2. Quality of Place

In several studies, quality of place is identified as a significant factor in attracting and retaining highly skilled individuals. Florida (2012) and Trip (2007) argue that certain urban characteristics—such as diverse social and cultural amenities, environmental quality, recreational opportunities, and community ties—play a decisive role in location decisions. Based on Trip's (2007) framework, Brown and Męczyński (2010) define quality of place through ten sub-categories.

The first is diversity, which relates to functional diversity, distinctive neighborhoods, and sufficient population density. Unique amenities include individual sports facilities, recreational spaces, retail and dining venues per capita, and public gathering areas. Vibrancy and culture refer to the variety of cultural and musical events, while aesthetics are assessed through architectural quality and urban heritage. Environment encompasses natural assets, environmental quality, brownfield redevelopment, and sustainability principles.

On the other hand, technology, talent, creativity, openness, and safety in quality of place headings are key to urban attractiveness and part of a holistic quality of place framework (Trip, 2007; Florida, 2012). Florida links these to the "creative class," echoing earlier theories. Darchen and Tremblay (2010) see this as an extension of Jacobs' ideas, while Glaeser (2005) highlights urban idea generation, reinforcing the relevance of creative environments.

4.2.3. Urban Amenities

Urban amenities constitute another important dimension that can influence location choices of highly skilled individuals. Landry (2000) argues that originality, spatial diversity, cultural and entertainment facilities, public spaces, and openness and tolerance are effective in attracting such individuals. However, there is no consensus in the literature regarding the impact of urban amenities. Some studies (Greenwood & Hunt, 1989; Arntz, 2010; Niedomysl & Hansen, 2010, as cited by Darchen and Tremblay, 2010) suggest that their influence on migration decisions is limited, while Storper and Scott (2009) challenge the rationale behind this assumption. Conversely, Liu and Shen (2014) report growing evidence in Western literature indicating that urban amenities have become increasingly influential in shaping migration trends and urban growth.

Glaeser et al. (2001), through the concept of the "consumer city," propose that modern urban growth is linked to the services and consumption opportunities cities offer, particularly in attracting highly skilled human capital. Arntz et al. (2023) also note that certain urban amenities—such as restaurants, nightlife, and cultural venues—can serve as attractions for highly skilled workers and influence their migration decisions. Drawing on Glaeser's (2005) perspective, Storper and Scott (2009) argue that attracting highly skilled individuals requires offering high-quality public schools, safe streets, and affordable housing.

5. Methodology, Case, Data

The Netherlands was selected as the case study for this research due to its increasing attractiveness to highly skilled migrants in recent years. An OECD report (2023) highlights that the country received approximately 171,000 new immigrants in 2021. According to Statistics Netherlands (CBS), the Turkish-Dutch community surpassed 170,000 between 1996 and 2022. In addition, the Global Competitiveness Report (Schwab, 2019) ranks the Netherlands fourth globally, with an overall competitiveness score of 82.4, and a notably high score of 84.6 in the highly skilled labour.

Projections by the Netherlands Interdisciplinary Demographic Institute (NIDI) and CBS estimate that by 2050, around 40% of the Dutch labour force will consist of immigrants (Moca-Grama, 2020; Pieters, 2020, as cited in Haşar, 2020). Furthermore, Türkiye is identified as one of the most significant countries of origin for graduate immigrants in the Netherlands, accounting for nearly 7% of all foreign knowledge workers (OECD, 2023). In the same year, migration from Türkiye to EU countries rose by 34%, reaching 71,000 individuals, with the Netherlands among the primary destinations.

5.1. Research Design and Approach

In that case, this study employs a mixed-methods design, combining quantitative and qualitative approaches for a deeper understanding of migration drivers (Creswell & Plano Clark, 2007). A semi-structured online survey—distributed via Google Forms using voluntary and snowball sampling—targeted highly skilled Turkish professionals in the Netherlands. It included Likert-scale, multiple-choice, and open-ended questions to capture both standardized data and personal insights. A pilot study improved clarity and alignment with the spatial and non-spatial migration factors. Ethical approval was granted by METU's (Middle East Technical University) Human Research Ethics Committee, and all responses were anonymous with informed consent obtained.

5.2. Analytical Framework: Spatial and Non-Spatial Factors

The conceptual framework of this study is grounded in the well-established distinction between spatial and non-spatial factors. Spatial factors are primarily linked to physical and infrastructural elements of urban planning and design, while non-spatial factors pertain to social, cultural, administrative, and economic drivers that are not directly tied to the built environment but nonetheless influence locational preferences.

Based on this classification, the study constructs its analytical model to evaluate how these categories of factors shape the international mobility decisions of highly skilled migrants. In this context, the research is guided by the following central question: “To what extent do spatial and non-spatial factors respectively influence the migration preferences of highly skilled people relocating from Türkiye to the Netherlands?”

These question serves as the analytical foundation for both the design of the survey instrument and the interpretation of empirical findings. It also aims to contribute to the broader scholarly discourse on international highly skilled migration by offering a structured comparison between tangible and intangible drivers of mobility.

Spatial-based variables are directly related to urban planning and physical infrastructure. Five primary categories were identified:

- **Public Facilities:** Encompassing healthcare, education, commercial and cultural services, recreational and shopping amenities, and urban scale.
- **Transportation:** Addressing urban transit systems, intercity connectivity, bicycle infrastructure, and parking accessibility.
- **Infrastructure:** Covering access and quality of essential services such as electricity, water, internet, as well as environmental factors like waste management and cleanliness.
- **Urban Aesthetics:** Evaluating the visual and spatial quality of the city, including preservation of natural and historical heritage.
- **Cost of Living:** Focusing on the affordability and accessibility of housing, land, and commercial spaces.
- **Non-spatial factors,** though indirectly shaped by spatial policies, are not directly tied to the built environment. These were categorized into six groups based on previous research (Murphy & Redmond, 2009; Brown & Męczyński, 2010; Musterd & Gritsai, 2013; Trip, 2007; Masch, 2022; Florida, 2012):
- **Cultural and Recreational Activities:** Availability and diversity of concerts, festivals, and theatres.
- **Social Structure:** Perceived community cohesion and social integration.
- **Safety:** Low crime rates, resilience to natural hazards, and general urban security.
- **Climate Conditions:** Comfort and sustainability of local weather patterns.

- **Public Administrative Services:** Efficiency and accessibility of administrative processes, residence and work permits.
- **Consumer Diversity:** Breadth of goods and services, particularly relevant to creative and financially independent individuals.

5.3. Data Analysis Methods

Quantitative data were analysed through descriptive frequency and numerical (percentage) analysis, enabling the identification of dominant patterns and trends. Open-ended qualitative responses were evaluated using thematic analysis by open, axial and selective coding methods (Moghaddam, 2006) to uncover deeper insights into participants' subjective experiences and motivations.

5.4. Participant Profile

A total of 198 highly skilled migrants participated in the survey, with 196 responses deemed valid and included in the final analysis. The majority of participants (90%) were between the ages of 25 and 44, with 46% in the 25–34 age group and 44% in the 35–44 age group. In terms of gender distribution, 73% identified as women, 25% as men, and 2% as LGBTI+. Regarding marital status, 71% of the participants were married, 18% were single, 7% were married with children, and 4% fell into other categories. The educational background of the sample was notably high, with 99% holding at least a bachelor's degree; specifically, 43% had completed a master's degree and 12% held a doctoral degree. Professionally, the sample was dominated by engineers, who constituted 38% of respondents. IT professionals followed this at 11% and researchers and academics at 8%. Other professional fields, including finance, marketing, healthcare, architecture, and design, were each represented by 4% to 7% of participants. The creative service sector had the lowest representation, with only 1.5% of respondents employed in that area.



Figure 1: Geographical Distribution of Highly Skilled Turkish Participants in the Netherlands

Geographically, participants were concentrated in major urban centers such as Amsterdam, Rotterdam, and Eindhoven. Smaller numbers were located in cities like Groningen, Enschede, and Nijmegen. Key factors in location choice included employment opportunities and perceived quality of life.

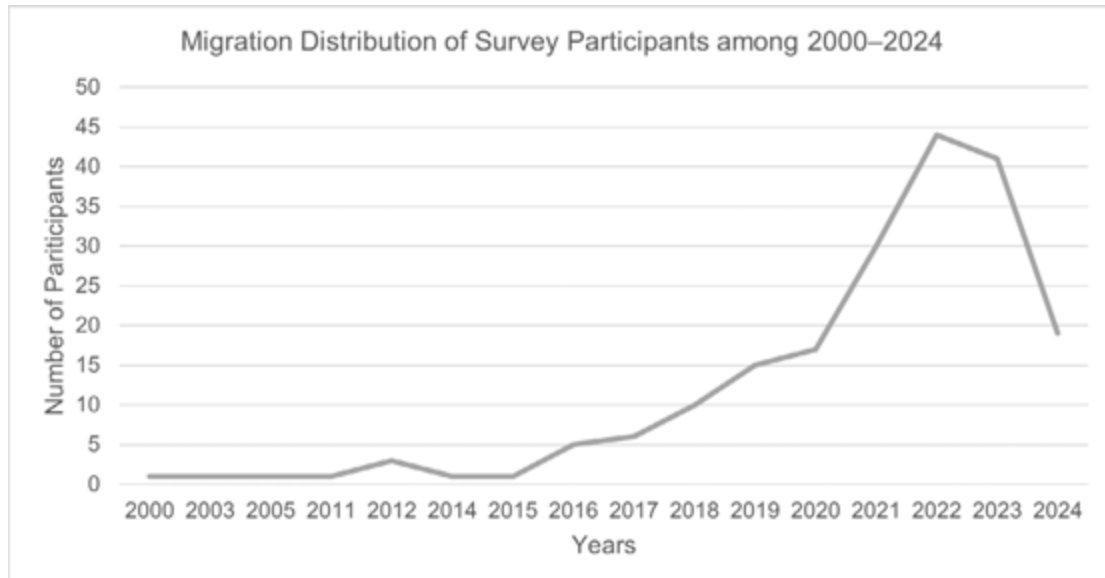


Figure 2: Annual Migration Distribution of Survey Participants among 2000–2024

Migration timing analysis showed an average length of stay of 40.3 months. A notable increase in migration occurred post-2016, attributed to domestic political instability, economic crises, and rising unemployment in Türkiye. Migration peaked between 2020 and 2022, spurred by the digitalization of work, remote employment opportunities, and increased living costs during the COVID-19 pandemic. A decline was noted in 2023–2024, likely due to stricter immigration and visa policies in European countries.

6. Findings

The survey results show that family ties are generally not a determining factor in decisions to migrate to the Netherlands; 93.4% of the participants find this factor unimportant, while the presence of friends and relatives is not a motivation for migration for the majority (67.3%, “not suitable”). However, family or personal reasons are important for some; 34.7% of the participants stated that they chose the Netherlands because of their spouse, partner or family’s employment situation. While educational background is ineffective for most (89.3%, “not suitable”), education plays a role in the decision to stay in the Netherlands for a small number (9.7%). On the other hand, employment conditions are a very important factor in migration decisions, with 45.9% of the participants seeing this as a “priority factor”. Living conditions are similarly influential, with 63.8% seeing this as a “priority factor”. Participants indicated that urban and social factors make the Netherlands attractive. These results reveal that migration decisions are mostly based on individual, economic, occupational and urban conditions.

It is clear that participants consider working and living conditions a priority in their migration decisions. How they define these conditions is illustrated in Tables 3 and 4, supported by excerpts from their responses to open-ended questions.

Table 1: Categorization of Participant Responses Regarding Living Conditions

PART OF RESPONSES	CODING	F	P (%)
"Green cities, beautiful architecture, urban planning"	Urban and Environ- mental Factors	146	30,1
"Environmentally friendly, calm, harmony with nature"			
"Less dense cities"			
"Ability to use public transport and bicycles"			
"Having the 15-minute city concept"			
"Short distances"			
"Easy access to other European countries"			
"Environmental cleanliness"			
"Availability and cleanliness of parks/gardens, availability of day-care centers in residential areas, financial and regional availability of activities/courses for children"			
"Accessible urban services"			
"Access to free education for children"	Economic and Fi- nance	96	19,8
"The salary and opportunities offered by doctoral programs were attractive"			
"Quality of education"			
"Welfare level of society"			
"High purchasing power"			
"Work life balance"			
"Low inflation"			
"Financial accessibility (house, car, vacation)"	Social and Cultural Environment	193	39,8
"International environment"			
"Liberal lifestyle, high rate of English speaking, relatively low racism"			
"Stress-free life"			
"Protection of human rights"			
"Individuality of religious values"			
"Feeling safe on the street at all hours as a woman"			
"Security, safety, peace"	Governance and Pub- lic Administration	35	7,2
"People speak English and are used to immigrants"			
"Social state concept"			
"Democracy"			
"Reliable legal system"			
"Fair progress of bureaucracy"			
"Living away from politics"			
"Secularism"	QoL	15	3,1
"Quality of life"			

Participants' responses, analysed through open, axial, and selective coding (Moghaddam, 2006), highlight the strong influence of distinct features on migration decisions. Key factors included access to green spaces, environmental cleanliness, efficient and reliable public transport, and high urban accessibility. Low population density and compact city layouts were also valued, especially in reference to the "15-minute city" concept, which supports time efficiency and quality of life. Proximity to other European countries further enhanced settlement preferences.

Education was another vital factor. Free, high-quality schooling and academic opportunities, especially at the doctoral level, shaped long-term professional goals. Economic motivations centered not only on income but also on financial stability, purchasing power, job security, and access to basic needs.

The social and cultural environment including safety, low discrimination, personal freedoms, and multicultural integration played a key role. Widespread English use and respect for diversity were seen as essential. Lastly, strong governance—marked by democracy, legal reliability, and transparent institutions—legal-political stability reinforced security and supported long-term planning.

Table 2: Categorization of Participant Responses Regarding Living Conditions

PART OF RESPONSES	CODING	F	P (%)
"The weekly working hours are generally 36-40 hours, and flexible work opportunities are common" "Low hierarchy, open communication culture, and employee appreciation" "Humane working conditions, work-life balance" "Flexible work models" "Employees are entitled to 20-25 days of paid vacation per year" "Dismissal procedures are regulated, and job security is high" "Work-life balance, vacations"	Work-Life Balance and Working Conditions	124	43,1
"High salary" "Fair wage policies" "Purchasing power"	Salary and Economic Factors	87	30,2
"Job descriptions are clear" "PhD programs and job opportunities" "Education and career development opportunities" "Professional development opportunities"	Job Description and Career Development	29	10,1
"Variety of alternatives" "International job opportunities"	Sectoral and Professional Opportunities	40	13,9
"Taxes are high (37-49%), but social services are good" "Tax advantages may be available for foreigners"	Taxation and Being a Social State	8	2,8

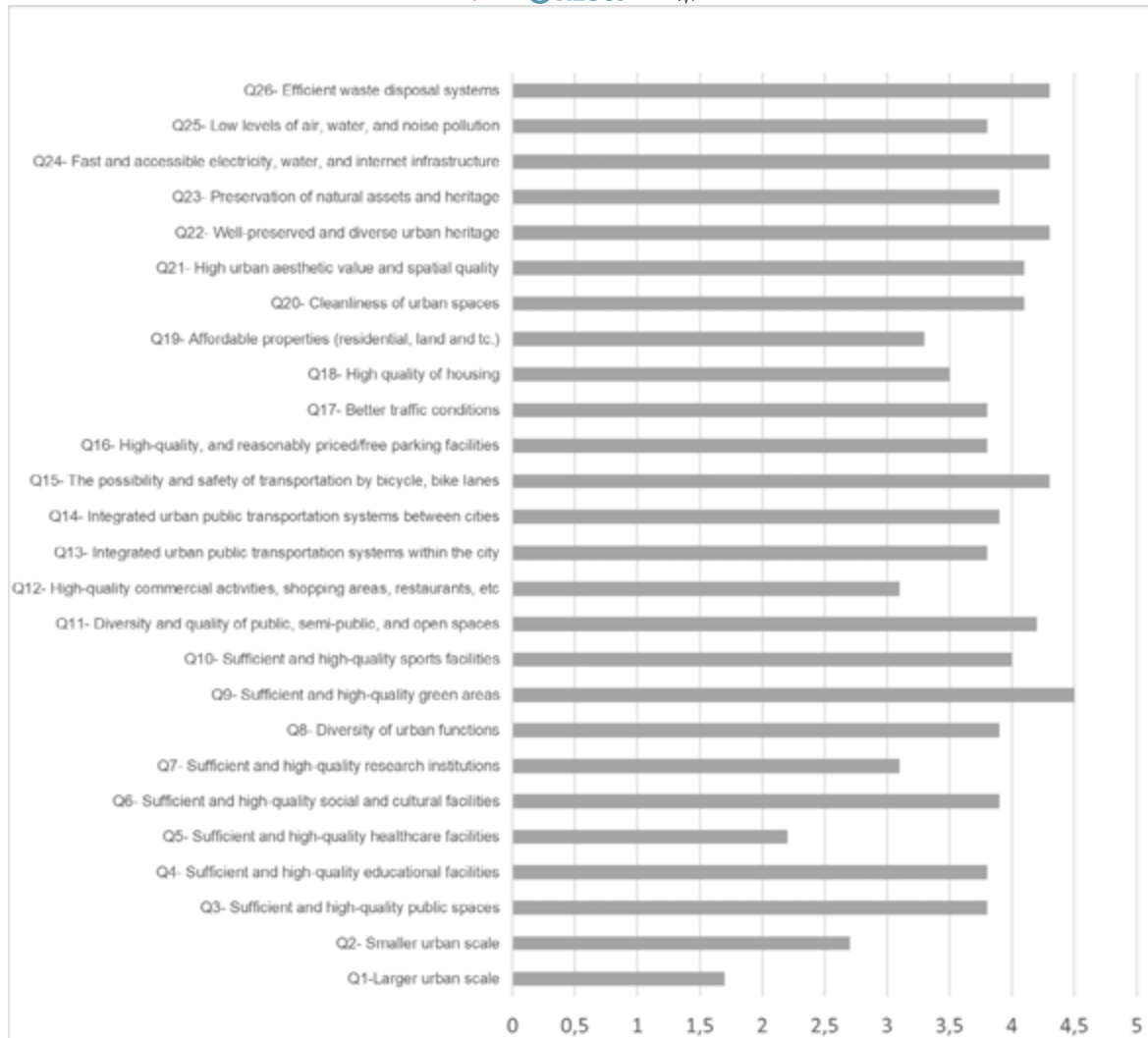
Participants' responses regarding work-life balance and working conditions come right after living conditions. It frequently emphasized flexible working arrangements, 36–40 hours of weekly work, horizontal organizational

structure and open communication environment. High job security, 20–25 days of paid leave per year and regular dismissal procedures were evaluated as important elements indicating the stability of the work environment. Responses regarding salaries and economic conditions reveal that strong purchasing power and fair wage policies are effective in attracting employees. In terms of job description and career development, respondents emphasized the clarity of job descriptions and the importance of various career opportunities regarding sectoral and professional diversity in the labor market and international job opportunities. In the views on the taxation system and the concept of the social state, it was stated that high tax rates are balanced with strong social services and that tax advantages and incentives offered to foreigners are an effective strategy in attracting international labor particularly highly skilled ones.

6.1. Assessing Spatial Factors

The analysis of spatial factors reveals that urban infrastructure, environmental quality, and mobility systems play a crucial role in the settlement choices of highly skilled Turkish migrants. Notably, a significant proportion of participants assigned high priority to access to high-quality green areas (Q9, 69.9%), the quality of public infrastructure such as electricity, water, and internet (Q24, 60.7%), safe and efficient bicycle infrastructure (Q15, 60.2%), and well-preserved urban heritage (Q22, 57.7%). Additionally, waste management systems (Q26, 55.6%) and urban aesthetics (Q21, 54.1%) were prioritized by more than half of the respondents. These findings collectively suggest that highly skilled migrants are particularly sensitive to the functionality, sustainability, and aesthetic value of their urban environments.

However, while spatial factors generally play a significant role in shaping mobility decisions, the level of importance attributed to individual features varies. For instance, elements such as city size (Q1, Q2; 68.2%, 32.7%), the availability of sufficient and high-quality healthcare services (Q5, 42.3%), and the provision of adequate, affordable parking facilities (Q16, 39.8%) were evaluated as less critical by a considerable segment of participants. This indicates that certain spatial dimensions hold a more limited role in the decision-making processes of highly skilled Turkish migrants, despite the broader relevance of spatial context.



Supporting this interpretation, the average score assigned to spatial factors on a five-point Likert scale was calculated as 3.7, underscoring the general importance attributed to urban infrastructure and environmental quality. Particularly prominent among the highly rated factors were access to sufficient and high-quality green spaces (4.5), cycling infrastructure and safety (4.3), well-preserved urban heritage (4.3), reliable and accessible infrastructure services (4.3), and efficient waste management systems (4.3). These findings highlight that participants place considerable value on the quality of infrastructure, landscape design, and historical fabric of the urban environments in which they reside (Florida, 2012).

In addition, other urban attributes such as access to sports facilities, diversity of public spaces, urban aesthetics, and cleanliness also received relatively high scores, further indicating that urban quality of life emerges as a central criterion in this case. Well-integrated public transportation systems, dedicated bike lanes, accessible highways, and international airports facilitate ease of movement and access to urban amenities (Glaeser et al., 2001). Similarly, cities become more attractive when traffic congestion is low and effective recycling services are available and consistently implemented (Lloyd & Clark, 2001). The cleanliness of streets, air quality, and overall visual character of the urban setting—as well as access to natural environments—have a demonstrably positive effect on individuals' physical and emotional well-being (Lloyd & Clark, 2001). Furthermore, the significance of monuments, architecture, and environmental quality in shaping urban appeal is also highlighted in the work of Brown and Męczyński (2010).

Conversely, certain factors such as city scale (1.7) and the perceived quality of healthcare services (2.2) were evaluated with relatively low scores, indicating their limited influence in pre-migration assessments. Interestingly, some of these less prioritized elements, such as healthcare and parking, emerged as sources of dissatisfaction

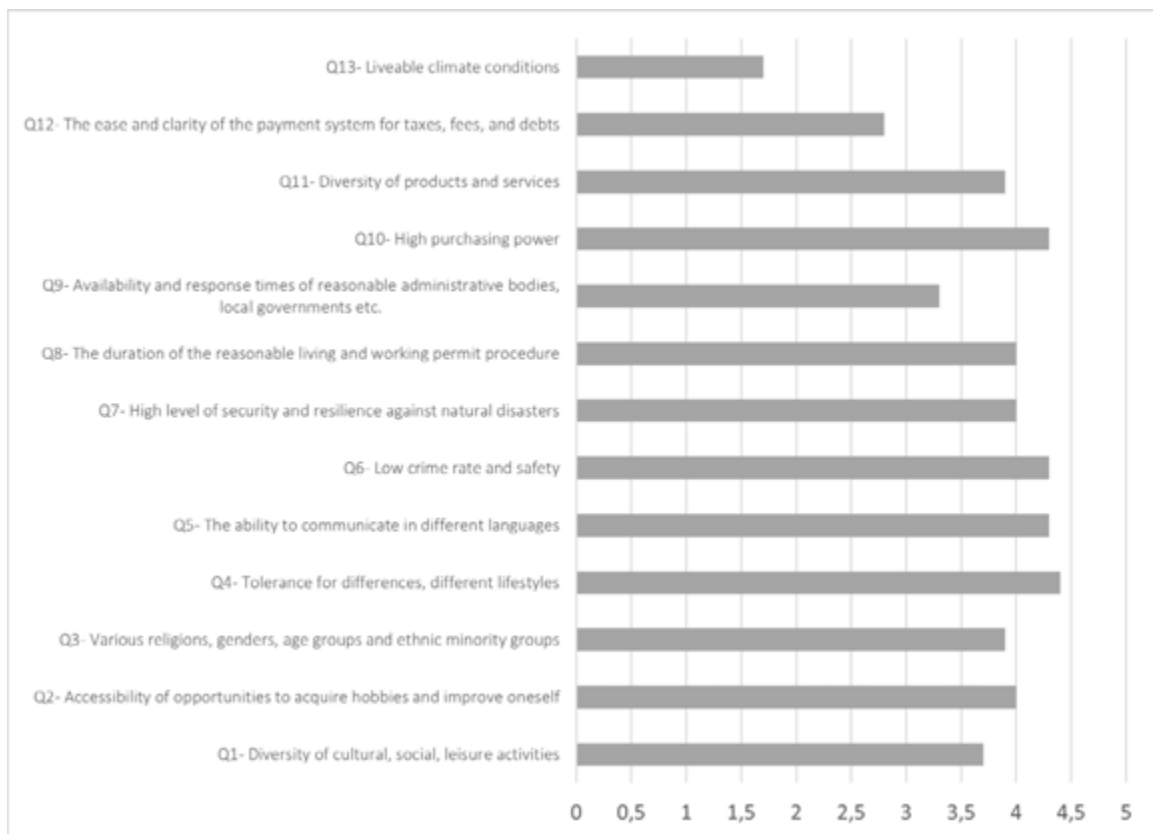
after migration. This suggests that pre-migration decision-making may benefit from a more comprehensive and forward-looking planning process that takes potential long-term needs into account.

In line with this, Landry (2000) emphasizes that a set of specific urban attributes such as authenticity, spatial diversity, cultural and entertainment amenities, the vibrancy of metropolitan life, access to public spaces, openness to diversity, and tolerance are particularly attractive to highly skilled individuals.

6.2. Assessing Non-Spatial Factors

On the other hand, non-spatial factors proved to be equally influential in shaping migration preferences. Public safety (Q6, 59.7%) emerged as particularly salient. Multilingual communication opportunities (Q5, 57.7%) and the level of cultural tolerance (Q4, 57.7%) were also marked as highly significant. Administrative efficiency in obtaining residence and work permits (Q8, 51.5%) and cultural inclusivity (Q3, 44.9%) followed. Protection from discrimination (Q7, 49.5%) and access to diverse consumer goods and services (Q11, 40.3%) were relatively less emphasized. These findings underscore that psychological comfort, social integration, and legal-economic stability are central to the formation of place attachment and the well-being of highly skilled migrants in this context.

One notable exception among non-spatial factors was climate. More than half of the participants (55.6%) indicated that “liveable climate conditions” (Q13) did not apply to their decision-making processes. This suggests that climate is a secondary concern of highly skilled participants compared to spatial, institutional, economic, and social variables.



Similarly, non-spatial factors were also attributed to high levels of importance, with an overall average score of 3.7 on the five-point Likert scale. The highest-rated dimensions included tolerance for different lifestyles (4.4), opportunities for multilingual communication (4.3), low crime rates and general safety (4.3), and high purchasing

power (4.3). These findings indicate that social cohesion, cultural diversity, and safe living environments play a decisive role in the urban preferences of highly skilled individuals. Moreover, factors such as administrative efficiency in obtaining residence and work permits (4.0), resilience to natural disasters (4.0), and access to a wide range of goods and services (3.9) were also evaluated positively, demonstrating their relevance in decision-making processes.

As Florida, Mellander, and Stolarick (2008) suggest, talented individuals from diverse backgrounds are more likely to feel at home in cities that foster an inclusive and tolerant culture. Complementing this view, Clark et al. (2003) emphasize that decisions regarding city selection extend beyond employment opportunities to encompass a broad array of life-quality factors. High earnings potential, professional growth opportunities, and a stable economic infrastructure further attract migrants (Storper & Scott, 2009). Additionally, crime rates are underscored by also Brown and Męczyński (2010) as a critical element shaping a city's appeal.

Conversely, certain variables such as the transparency of tax and fee systems (2.8) and liveable climate conditions (Q13, 1.7) received comparatively low scores. In particular, the low evaluation of climate-related factors suggests that this group of migrants tends to prioritize economic, social, and administrative criteria over environmental variables in their decision-making processes. Masch (2022) identifies such elements—including administrative flexibility, taxation, subsidies, and the availability of a skilled workforce—as “soft factors,” which, along with climatic considerations, are shown to be less influential in this context (Murphy & Redmond, 2009; Brown & Męczyński, 2010; Musterd & Gritsai, 2013).

Taken together, the findings illustrate that both tangible urban infrastructure and intangible socio-cultural conditions jointly shape the decisions of highly skilled migrants. A particularly notable outcome is the fact that spatial and non-spatial factors received equal average scores (3.7), suggesting that both categories are perceived as equally significant in shaping migration preferences. This equilibrium indicates that physical urban elements are evaluated in conjunction with social attributes like inclusivity, safety, cultural diversity, and administrative functionality in that case.

In other words, for Turkish highly skilled individuals in the Netherlands, urban liveability is not solely determined by the social atmosphere and institutional arrangements offered within it, but also by the quality of the physical environment. This balance underscores the multidimensional nature of mobility decision-making in today's global labour market. Rather than being driven solely by economic or environmental considerations, location choices are increasingly grounded in holistic assessments. Consequently, for cities aiming to attract and retain highly skilled migrants, the development of integrated and sustainable urban policies—addressing both physical infrastructure and social cohesion—plays a critical role in ensuring long-term attractiveness.

7. Conclusion

This study set out to explore the locational preferences and migration drivers of highly skilled Turkish individuals who have relocated to the Netherlands, with a particular focus on the influence of spatial and non-spatial factors. Drawing on a comprehensive literature review, theoretical frameworks such as the 3T model and life-course perspectives, and empirical findings from a mixed-methods survey, the research reveals that highly skilled mobility is shaped by a complex interplay of tangible urban attributes and intangible socio-cultural, economic, and political conditions.

The results show that spatial factors—particularly urban infrastructure, environmental quality, green spaces, and cycling infrastructure—play a crucial role in shaping settlement preferences. Participants placed significant value on well-preserved urban heritage, waste management systems, and urban aesthetics. However, some physical attributes such as city scale and healthcare services were rated as less critical in pre-migration evaluations, though they later emerged as sources of dissatisfaction post-migration. This highlights a potential gap between expectations and lived experiences that cities must address through more comprehensive planning.

Equally important, non-spatial factors demonstrated a high degree of influence on migration decisions. Safety, cultural tolerance, multilingual communication, and administrative efficiency were among the most decisive variables. The prominence of these factors indicates that psychological comfort, legal clarity, and inclusive urban atmospheres are key components of urban attractiveness for highly skilled migrants. Notably, climate conditions—which are often assumed to influence migration—were rated among the least important factors in this context.

A particularly significant finding of the study is the nearly identical average scores assigned to spatial and non-spatial dimensions (3.7 out of 5), underscoring their equal importance in the migration decision-making process. However, when disaggregated, social and cultural factors appear to slightly outweigh physical attributes in overall impact. This suggests that cities aiming to attract and retain global talent must not only invest in infrastructure and services but also foster a tolerant, inclusive, and culturally rich environment.

In sum, the migration decisions of Turkish highly skilled individuals are not determined by a single dimension but shaped by the combined effects of quality of life, institutional efficiency, urban functionality, and socio-cultural climate. This underscores the need for integrated, holistic urban strategies that address both material and experiential dimensions of city life. As global competition for talent intensifies, cities that balance these attributes will be better positioned to sustain long-term economic vitality and social cohesion.

8. Limitations

The findings of this study should be evaluated within the framework of some methodological and practical limitations. Due to the dynamic and context-specific nature of the migration phenomenon, temporal and spatial variables are important. This situation limits the generalizability of the findings to different periods or geographical contexts.

Although the participants showed a certain diversity in terms of age, gender, marital status, education level and occupational fields, the sample was concentrated in knowledge-based fields such as engineering, informatics and academia.

In terms of time, most of the participants migrated after 2016. This migration movement accelerated even more after 2020 and reached its peak in 2022. The number of participants migrating in 2023 and 2024 was lower. The data only reflects a certain period. Therefore, the study has limited capacity to make inferences about long-term trends. Although there was diversity in terms of time, demographics and occupation, equal representation could not be achieved among the subgroups.

Data collection was conducted only through a survey, and qualitative methods were used only within the survey. This situation made it difficult to obtain in-depth information.

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