ANALYSIS OF THE FACTORS AFFECTING THE SELECTION OF THE SITE-LOCATION FOR HEALTH FREE ZONE IN TURKIYE

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ABSTRACT

Purpose- The purpose of this study is to investigate and analyze the factors affecting the location selection for Health Free Zone in Turkey if established. Since 1980's various transformations are experienced in health sector worldwide with the effects of global neo-liberal policies. New products, new methods, and new markets are emerged. Health tourism and Health Free Zones (SASEB) are at the forefront of these developments. First, the health tourism entered the world agenda in 1990s, and since the 2000s, Health Free Zones have followed this trend. The Health Free Zone project attracts the attention of many countries that want to get a big share from the global health tourism market, to attract foreign direct investments (FDI), to benefit from technology transfer, to increase health quality and standards, to exchange information and experience, and to attract specialist physicians and health personnel. United Arab Emirates was the first country in the world to realize this project in 2002, and in the following years, China, South Korea, Indonesia and Nigeria started the implementation steps, and countries such as Turkey and India could not continue despite their rapid start. Although the Health Free Zone project, which came to the fore in Turkey in 2010, aroused great excitement in the whole country, the project could not be realized. With the change of the minister and senior bureaucrats of the period, the interest of the government in SASEB project decreased. Although attempts have been made by the private sector in various provinces, no results have been achieved until today.

Methodology- In this study, an answer has been sought to the question of what are the factors that affect the selection of the location for SASEB. The study was conducted with a sample group consisting of those working in the health sector or related fields in Turkey. A total of 518 persons have participated in the study, in which a 5-point Likert scale and quantitative method was used. Parametric analyses were carried out with the data obtained from the remaining 491 individuals, after subtracting 27 units from the data, which hindered the normal distribution of the data. Frequency charts of demographic data belonging to the sample group were drawn by using SPSS v.23, and the obtained data were also subjected to t-test and ANOVA analysis.

Findings- The analysis reveals that the majority of the sample group confirmed that Istanbul (89,6%), Izmir (88,4%), Antalya (87,3%) and Ankara (83,9%) were the most appropriate provinces for the SASEB project. The strategic situation of the location has a significant impact on the decision processes (92,3%), followed by other factors such as the availability of transportation facilities (91,7%) and the availability of airport facilty in the region (90,1%).

Conclusion- Based upon the analiyis, it has been revealed that Istanbul is the most appropriate city for SASEB project, due to its sea, airport, road accessibility and other infrastructure possibilities, followed by İzmir.

Keywords: Health free zone, sağlık serbest bölgesi, medical tourism, SASEB, health tourism
JEL Codes: I11, N22, M21

1. INTRODUCTION

The location selection of enterprises is a strategic decision. One of the most important problems faced by the managers who take the decisions of the enterprises is to decide where the enterprise will be established. Site/location selection is a process of great importance for commercial and non-commercial organizations. In addition to economic factors, place-related retention factors (emotional bond and identity) and attraction factors (brand image, visual image, fame, etc.) come to the fore in location selection (Dixit vd., 2019). It is expected that the decision processes that require the irreversible allocation of working capital and which, if the right decision is not taken, can cause great losses for the business, are expected to be carefully managed. First of all, the purpose of the decision to be taken should be clear and understandable, and the decision support tools and methods to be used in decision making, should be selected carefully. Decision making in businesses is the process of choosing the most appropriate one from various options. Although it differs between sectors, there is a correlational relationship at varying levels between the success of the business and the choice of location (Krugman, 1999). The level of

relationship is determined by many variables such as business type, type of activity, production process, logistics facilities, trade volume, number of employees, competitiveness, zoning rules, size of the land, legislation, target markets, supply chain, national or international relations and environmental factors. Putting forward a good and understandable definition of the purpose also plays an important role in determining the method. In this study, the factors affecting the selection of the settlement area for the Health Free Zone in Turkey, were investigated. First, we will make a brief literature review on the concepts of health and free zone below.

2. LITERATURE REVIEW

The Health Free Zone (SASEB), which is a new concept in the global sense, rises on two pillars. One of them is health and the other one is free zone. The Health Free Zone points to a phenomenon that emerges at the intersection of these two concepts (Yılmaz, 2023). The World Health Organization defines health not only as the absence of disease and infirmity, but also as a state of complete social, economic and psychological well-being (WHO, 2021). Health has always been a priority for humans since the beginning of the first human life on earth. It is known that the first medical foundations were laid in ancient civilizations to protect human health and cure diseases. For example, the ancient Egyptians, as the ancestors of medicine, pioneered the whole world in this field. In the medical papyri found in Egypt, diseases are described very clear in a surprising way and there are treatment methods that shed light on our day. Urinary disorders such as hematuria, urinary retention, urinary frequency, infection and droplet can be given as examples (Salem & Eknoyan, 1999). In ancient civilizations, where it was believed that diseases were largely caused by the deterioration of the balance between mind, soul and body, the solution could only be possible by rebuilding this balance. One of the main reasons for the criticism of today's Western-based conventional medicine is the neglect of these three basic elements in treatment. It is increasingly recognized that pathogen-focused therapy is no longer sufficient to treat today's health problems. Other issues in which today's conventional medicine is criticized are excessive use of synthetic drugs and excessive medicalization. When all these are combined with the increasing health expenditures caused by Western medicine, the search for new alternatives becomes inevitable.

From another point of view, health tourism and Health Free Zones can be seen as new approaches developed against the inadequate Western medicine, although they emerged as a result of neo-liberal policies(Yılmaz, 2023). Health tourism has become a major global market in the last 20 years. There are many definitions in the literature about health tourism (Kılıç & Güler, 2021; Tengilimoğlu, 2020; Yılmaz, 2011). It is generally defined as traveling from the country of residence to another place for the purpose of treatment. If the concept of health tourism is compared with the point it has reached today, it is possible to talk about an expansion in the scope and framework of the concept. While travels made from one place to another for health and treatment purposes were defined as health tourism, the idea that this definition was not sufficient and could not adequately describe the real phenomenon began to develop. Some researchers define it as a trip made by patients who aim to be treated, as well as those who want to prevent diseases that may occur. In addition to all these treatment purposes, it can turn into multidimensional programs such as culture, entertainment, travel, history, religion and aesthetics (Ağaoğlu vd., 2019). In short, many factors should be taken into account when defining health tourism such as the size, scope and duration of the health service received. Health tourism has also various sub-derivatives such as medical tourism, thermal tourism, SPA-Wellness tourism and third age tourism.

As for the free zone, which is the second pillar of the health free zone. Free zones, where more than one enterprise is located, are seen as an important tool in the foreign trade. As in health tourism, free zone do not have a single definition throughout the world, take various forms and contents with factors such as country, time, type of structure, scale, and defined by various names such as free trade zones, duty-free zones, special economic zones, export processing zones etc. (OECD, 2009). The World Customs Organization considers the free zone as an important tool because of its contribution to the economic development of countries and the development of global market networks (WCO, 2021). European Union; defines the free zone as closed areas where commodities coming from outside the Union can be processed within the customs territory of the Union without paying any import taxes and duties (EU, 2021). OECD defines free zones with a 4-type typology as (i) Free trade zones, (ii) Export processing zones, (iii) Specialized zones and (iv) Special economic zones. Financial Action Task Force, abbreviated FATF, which has a detached structure between governments within the OECD; sees free zones as areas that have a special position in customs and tax audits, and where incentive and grant regulations are applied in import and export activities (FATF, 2010). The International Labor Organization recognizes that production-oriented export processing zones are established to attract foreign investors and are industrial places where imported materials and raw materials are subjected to special processes for re-export (ILO, 2003).

3. DATA AND METHODOLOGY

In this study quantitative method was chosen as it provides both the opportunity to generalize the results to the universe and the opportunity to work quickly with closed-ended questions. The repeatability of this method shows the strength of the method. After the study has started, there is no possibility to intervene in the process as in the qualitative research method, but at the beginning, the researcher has all the authority and freedom while preparing the questions. With this method, it is aimed to understand the current situation. Quantitative analysis, which means compiling and evaluating the numerical data related to the cases subject to the research with mathematical and statistical methods, aims at the mathematical expression and description of the cases. It becomes possible to reach more people in less time, and to make the obtained data and distributions more clearly with numerical expressions. Quantitative research, which is heavily influenced by positivism, is generally based on the deductive approach, unlike the inductive approach in qualitative research. With the sample taken from the universe, it is tried to reach the characteristics of the universe (Kadıoğlu Ateş and Mazı, 2017). This method, in which the relationship between at least two variables is investigated, contains a natural limitation that seeks answers to the questions of significance, relationship and whether there is a difference. It facilitates the measurement, evaluation and comparison of data and helps to understand whether there is a relationship or difference between them. Its weaknesses are that it offers participants a limited number of options with closed-ended questions (for example, 5-point Likert: "Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly Disagree"). For this reason, it

is limited to go into too much detail and give in-depth information about the cause of the phenomenon. In order to eliminate the limitations encountered in quantitative research, it is inevitable to benefit from Güvenen's transdisciplinary science method used in research on multidimensional and multifactorial social phenomena (Güvenen, 2016).

In the study the data were collected by questionnaires, and analyzed with SPSS v.23 statistical program. The findings obtained from the analyzes are presented below.

4. FINDINGS

In this study, descriptive statistics, independent samples T-test, and One-Way ANOVA tests were used to examine if there were differences in variables among defined groups. The frequency distributions of the sample group for gender, age, education and profession are given in the table below:

Table 1: Demographics of the Sample Group

Variables	Categories	N	(%)	Variables	Catergories	N	(%)
Gender	Male	163	33,2		Bachelor	36	7,3
	Female	328	66,8		Higher Vocational Ed.	80	16,3
Age	18-30	270	55,0	Graduation	University	279	56,8
	31-40	130	26,5		Master	61	12,4
	41-50	66	13,5		Doctor of Philosophy	35	7,1
	51-60	22	4,5	Working period in health tourism	I don't work in this field	145	29,5
	60+	3	0,5		0-5 years	286	58,3
Title	Owner-Partners	11	2,2		6-10 years	44	9,0
	President-Top manager	8	1,6		11-20 years	12	2,4
	Academicians	18	3,7		20 years and above	4	0,8
	Physicians	44	9,0	The answers of the sample group about whether there is a need for SASEB	Absolutely no need	5	1,0
	Health professional	158	32,3		No need	11	2,2
	Nurse	198	40,3		No idea	185	37,7
	Ministry-Businessmans	54	11,0		There is need	175	35,6
					There is absolutely need	115	23,4
	Total	491			Total	491	

The table indicates that the education level of the nurses, who constitute the largest group in the sample group, is also high. The education levels are as follows; High school 5.6%, Vocational School 11.1%, University 73.2%, Master's 9.5% and Doctorate 0.5%. The ratio of nurses who have university, master's and doctorate education levels was measured as 83.3%. The ratio of nurses who graduated from High School and Vocational School and worked at a lower level is 16.7%. The results reveal that the nurses participating in the research mainly hold high-level positions such as managers, coordinators, surgical nurses, and department chiefs. On the other hand, when we look at the education level of the sample group in general, there is a 7.4 point difference in favor of women between men and women in graduate and doctorate degrees (53.7%/46.3%). While women between the ages of 18-55 (67.0%) constitute the majority, a change in favor of men is observed in the age group of 56 and over. High school, vocational higher school and university undergraduate education levels of women working in the health sector are very close to national and international data. In general, it is understood that the sample units have the power to represent the population in terms of quality as well as quantity.

Tablo 2: Factors Affecting the Decision of the Sample Group

	What factors did you affect when answering the question, which is the most appropriate province for the Health Free Zone to establish?		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
ILT1	Availability of accommodation facilites in the province	Frequency	-	3	53	189	246	491
		Ratio	*-*	*,6*	*10,8*	*38,5*	*50,1*	*100*
ILT2	Availability of thermal waters in the province	Frequency	3	15	115	172	186	491
		Ratio	*,6*	*3,1*	*23,4*	*35,0*	*37,9*	*100*
ILT3	Availability of other tourism opportunities/facilities	Frequency	-	7	52	188	244	491
		Ratio	*-*	*1,4*	*10,6*	*38,3*	*49,7*	*100*
ILT4	Availability of socio-cultural infrastructure/facilities	Frequency	-	3	51	189	248	491
		Ratio	*-*	*,6*	*10,4*	*38,5*	*50,5*	*100*
ILT5		Frequency	1	8	66	182	234	491

	Support of governmental institutions for the province	*Ratio*	*,2*	*1,6*	*13,4*	*37,1*	*47,7*	*100*
ILT6	Support of scientific institiuitons for the province	Frequency	-	4	62	178	247	491
		Ratio	*-*	*,8*	*12,6*	*36,3*	*50,3*	*100*
ILT7	Support of business world for the province	Frequency	2	4	76	176	233	491
		Ratio	*,4*	*,8*	*15,5*	*35,8*	*47,5*	*100*
ILT8	Availability of qualified employees in the province	Frequency	2	2	65	182	240	491
		Ratio	*,4*	*,4*	*13,2*	*37,1*	*48,9*	*100*
ILT9	Interest of foreign investors for the province	Frequency	1	6	57	189	238	491
		Ratio	*,2*	*1,2*	*11,6*	*38,5*	*48,5*	*100*
ILT10	Interest of domestic investors for the province	Frequency	2	5	59	184	241	491
		Ratio	*,4*	*1,0*	*12,0*	*37,5*	*49,1*	*100*
ILT11	I myself am interested in investing in this province	Frequency	15	29	91	163	193	491
		Ratio	*3,1*	*5,9*	*18,5*	*33,2*	*39,3*	*100*
ILT12	Strategic added value of the location	Frequency	-	2	36	164	289	491
		Ratio	*-*	*,4*	*7,3*	*33,4*	*58,9*	*100*
ILT13	Availability of transportation facilities in the province	Frequency	-	1	40	183	267	491
		Ratio	*-*	*,2*	*8,1*	*37,3*	*54,4*	*100*
ILT14	Availability of airport facilty in the province	Frequency	-	3	46	182	260	491
		Ratio	*-*	*,6*	*9,4*	*37,1*	*53,0*	*100*

The results of the answers given by the sample group regarding the variables that have an effect on the location selection are as follows: Availability of accommodation facilites in the province 88,6%, Availability of thermal waters in the province 72,9%, Availability of other tourism opportunities/facilities 88%, Availability of socio-cultural infrastructure/facilities 89%, Support of governmental institutions for the province 84,8%, Support of scientific institiuitons for the province 86,6%, Support of business world for the province 83,3%, Availability of qualified employees in the province 86%, Interest of foreign investors for the province 87%, Interest of domestic investors for the province 86,6%, I myself am interested in investing in this province 72,5%, Strategic added value of the location 92,3, Availability of transportation facilities in the province 91,7%, Availability of airport facilty in the province 90,1%.

The results confirm that the strategic feature of the location takes priority with 92,3%. Followed by the variables "Availability of transportation facilities in the province (91,7%)" and "Availability of airport facilty in the province (90,1%)".

The results, obtained in the t-test, conducted to determine whether there is a difference between men and women regarding the effect of factors, show that there is no such difference ($p > 0.059$). Regarding the effect of education levels, it was found that there was no such difference in the ANOVA analysis conducted to determine whether there was a significant difference between men and women ($p > 0.481$). Likewise, it was found that there was no such difference in the ANOVA analysis conducted to determine whether there was a significant difference related to the effect of occupation levels ($p > 0.356$).

5. CONCLUSION

With this research conducted for the first time in Turkey in this field, it was revealed that the city of Istanbul would be the most suitable place to establish a Turkish health free zone, followed by Izmir and Antalya, respectively. Among the reasons for choosing these three provinces, the most important ones are the strategic location, the good transportation facilities, especially the airport, the accommodation infrastructure, and the high number of qualified people to be employed.

REFERENCES

Ağaoğlu, F. O., Karagöz, N., & Zabun, S. (2019). Sağlık Turizmi uygulamaları ve türkiye'ye getirilerine ilişkin bir değerlendirme. Cumhuriyet Üniversitesi İktisadi ve İdari Bilimler Dergisi, 20(2), 428-450.

Dixit, A., Clouse, C., & Turken, N. (2019). Strategic business location decisions: Importance of economic factors and place image. Rutgers Business Review, 4(1).

EU. (2021). Free zones. https://ec.europa.eu/taxation_customs/free-zones_en

FATF. (2010). Money Laundering Vulnerabilities of Free Trade Zones. The Financial Action Task Force.

Güvenen, O. (2016). Transdisciplinary Science Methodology as a Necessary Condition in Research and Education. Transdisciplinary Journal of Engineering & Science, 7(1). https://doi.org/10.22545/2016/00080

ILO. (2003). Employment and Social Policy in Respect of Export Processing Zones (EPZs) (GB.286/ESP/3).

Kılıç, B., & Güler, E. G. (2021). Turist rehberlerinin arıcılık turizmine yönelik bilgi ve algı düzeylerinin tavsiye niyetine etkisi: Türkiye örneği. Sosyal Bilimler Araştırma Dergisi, 10(4), 813-823.

Krugman, P. (1999). The role of geography in development. International Regional Science Review, 22(2), 142-161. https://doi.org/10.1177/016001799761012307

OECD. (2009). Towards Best Practice Guidelines for the Development of Economic Zones.

Salem, M. E., & Eknoyan, G. (1999). The Kidney in Ancient Egyptian Medicine: Where Does It Stand? American Journal of Nephrology, 19(2), 140-147. https://doi.org/10.1159/000013440

Tengilimoğlu, D. (2020). Sağlık Turizmi (3.baskı) Siyasal Kitabevi.

WCO. (2021). World Customs Organization. http://www.wcoomd.org/en/search.aspx?keyword=free+zone

WHO. (2021). Constitution of the World Health Organization. https://www.who.int/about/governance/constitution

Yılmaz, C. (2011). Medikal Turizm Araştırması 2011 (2011. bs). Sağlık Bakanlığı.

Yılmaz, C. (2023). Türkiye ve Dünyada Sağlık Serbest Bölgesi Girişim ve Uygulamaları; Tarihsel Arka Plan, Kavramsal Çerçeve ve İhtiyaç Analizi [Doktora Tezi]. İstanbul Gedik Üniversitesi.