



## Examination of Shopping Malls on The Usage Preferences of Physical Disabilities: On-Site Evaluation From Konya/Turkey

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### ABSTRACT

With this research, the suitability of the existing large shopping malls in the city of Konya for the use of physically disabled individuals, the problems they may experience in their use and their expectations were evaluated. For this purpose, a survey was conducted in 4 large shopping malls, private or public rehabilitation malls for the disabled, and the Konya Branch of the Turkish Association for the Disabled. The research was carried out in 2018-2019. A survey was conducted with disabled people who volunteered on different days, weekdays, and weekends. Even though it is difficult to access, the shopping mall where they can be most comfortable as a disabled person has been "Novada". While "Novada AVM" stands out due to the ease of use of the sanitary facilities, the presence of landmarks for the visually impaired, the presence of a battery-chair charging station and the availability of wheelchairs, "Kent plaza", where its staff receives "sign language" training for the speech-impaired, is one of the preferred shopping malls. In this research, "Kulesite" shopping mall has been the most preferred shopping mall due to the ease of transportation by "tramway".

### 1. Introduction

The increase in the world population has a significant impact on the development and growth of cities. This development and growth in cities cause a decrease in urban open and green spaces over time. It is a common problem today that green areas lose their properties because of structuring over time (Arisoy 2020, Akay and Önder 2022, Olgun et al. 2022).

People who cannot reach green areas have started to prefer shopping centers that stand out with their large gardens in the city.

Cities that develop unplanned after industrialization make it difficult for people to live in the city. The fact that wrong urban space designs cause serious productivity losses even in people without any physical disability draws even more attention to the problems of people with temporary and permanent disabilities (Güngör, Atasoy and Arisoy, 2018).

Shopping malls are at the forefront of postmodern areas that fulfill the functions of the city square or streets and avenues of the past in terms of their functions, but where there is no limit in terms of usage permits. The new production-consumption relations and developments in communication that emerged after

industrialization brought some different practices in public spaces (Taşçı, 2014).

Cities, which have grown rapidly and become unplanned with industrialization movements, make people's collective lives increasingly difficult. The fact that faulty urban designs cause serious loss of productivity even on people who do not have any physical disability draws more attention to the problems of people with temporary and permanent disabilities. One of the main problems in our country as well as in the world is the situation of disabled individuals and their families. Disabled people, who are an integral part of society, often encounter obstacles in social life, as they are seen as consumers and people in need of care. This situation: it tires people with disabilities more than the deficiencies caused by their physical disabilities (Bekci, 2012).

According to the reports prepared by the United Nations (UN) and the World Health Organization (WHO), it is observed that approximately 10% of the world's population is disabled and this rate reaches 15% in some countries. In our country, according to the data of the Turkish Statistical Institute (TUIK), 12% of our population consists of individuals with disabilities. Accordingly, it is understood that approximately 8.5 million

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disabled individuals live in our country (Yılmaz et al. 2012).

In our country, where the rate of disabled people is so high, there are many problems faced by individuals with different types of disabilities, especially in their internal circulation in the places they live, in reaching the urban spaces from these spaces and using the spaces comfortably. These problems include both physical problems related to the use of urban space and social problems related to urban life. These social and physical problems prevent the person from socializing. Disabled individuals cannot even step into working life due to discriminatory practices. Disabled individuals cannot move easily in urban areas and cannot use urban transportation vehicles in a way that they can continue their daily lives. At the same time, individuals experience the negativities of being disabled at the highest level due to the fact that institutions and many urban structures are not suitable for disabled individuals (Yılmaz and Özseret, 2013).

In addition to individuals with permanent disabilities, every person may experience temporary disability at a certain time in their life. Even a healthy person can become disabled for some reasons such as insomnia and lack of attention. In addition, the quality of life of the city is very important for children, the elderly and mothers who use strollers. In this context, the regulation of the physical environment conditions in a way that facilitates the life of the disabled will be resolved with the sensitive behavior of the responsible persons and organizations. For this reason, many studies are carried out on this subject to attract the attention of people and organizations (Bekci, 2012).

The World Health Organization (WHO) defines disability as “a deficiency or limitation in the performance of normal activities, expressed as the behaviors, abilities and tasks expected of the person or the body as a whole” (WHO 1980). According to the expanded definition by the ICIDH (International Classification of Impairments, Disabilities and Handicaps), an extension of the World Health Organization, disability is “the deprivation and/or limitation of the ability of a person to perform what is considered normal and perform the activities expected in a certain manner because of disability. (Bush 2006). Disability is the mental-physical disorders that limit the individual's life activities, and it is a state of limitation-deficiency in the abilities and power of the individual (Coleman, 2000; Whyte and Ingstad, 1995).

Approximately 10% of the world's population (Helander, 1993) and approximately 12% in our country (Prime Ministry Administration for Disabled People, 2003) consist of disabled individuals. When one wonders what the status of the research of countries with disabilities is, which have a significant proportion in terms of population, it can be said that there are sufficient studies on the subject in the USA and European Union countries. Compared to these countries, it can be said that Turkey's attempts to create academic/national research and databases on people with disabilities are

insufficient. Even though the necessary legal regulations and practices have started to be implemented within the framework of the European Union harmonization policies in Turkey in recent years, the important thing is to reveal what, which practices, and behaviors are "blocked" for disabled individuals in the context of daily life practices and social relations (Burcu, 2007).

Sociological studies on disability state that the meaning of disability is related to the reactions of other people. Undoubtedly, the socio-cultural characteristics of that society are effective in the formation and shaping of these reactions. For example, a paralyzed woman is disabled because her mobility is impaired. However, beyond the limitation of movement, disability in the social sense is not only the situation of not performing the movement, but also the result of the society's failure to provide ramps, elevators, pavement crossings to the wheelchair individual, and on the other hand, it is related to being prevented by others living together due to this failure. Therefore, it is important to describe what is thought about people with disabilities, when it is accepted that others' perspectives on disabled people are important factors that determine the social position and cultural portrayal of disabled people (Burcu, 2011).

Shopping is a very ancient and fundamental form of action that has been performed by mankind since its existence. The adventure of consumption, which started in agoras, open and closed marketplaces, with the rise of capitalism in the 19th century, extends to the backs and passages, to the big stores, which are considered the ancestors of consumption places, to the inner-city shopping malls and to the consumption cathedrals as it is used today (Süer and Sayar 2001).

Due to the industrial revolution and the rapid rise of capitalism and the development of production processes, an extraordinary increase was observed in the amount and variety of products produced. In order to sell and consume the surplus products produced, the demand for the produced product had to be created and the market expanded. Thus, the process was constructing a new social form with the consumption tools it designed in accordance with its own logic. The subsistence economy, which has a certain sociability and unique relationship style in open and small-scale markets, has gradually left its place to larger markets and stores, and the social relations in these new spaces have transformed (Aydın, 2005).

The aim of this study is to identify the problems and difficulties faced by disabled individuals, who are an important part of social life, in shopping malls, what is effective in their shopping mall choices, and to develop solutions.

## 2. Materials and Methods

The main material of the study is the shopping malls in Konya. Within the scope of the study, Accessibility Basic Information Technical Manual for Local Governments published by the Prime Ministry Administration

for Disabled People (OZIDA) and TS 12506 "Urban Roads - Structural Measures and Markings on Streets, Avenues, Squares and Roads for the Disabled and Elderly" prepared by the Turkish Standards Institute (TSE). Design Rules", TS 12576 "Structural Measures for Accessibility on Urban Roads, Sidewalks and Pedestrian Crossings and Design Rules of Markings", TS 9111 "Regulations for the Residence of Disabled People", "Accessibility for the Disabled for an Unhindered Environment" published by the United Nations Design Guide" and "ADA Accessible Design Standards", standards published by various individuals, institutions and organizations were taken into consideration.

In the survey studies, the expectations of the disabled individuals regarding the interior architecture and plant design in the shopping malls and transportation to the shopping mall were evaluated. For this purpose, a survey was conducted in 4 large shopping malls, private or public rehabilitation malls for the disabled and the Konya Branch of the Turkish Association for the Disabled. A survey was conducted with the disabled people who volunteered on different days, including weekdays and weekends, regarding the choice of shopping mall. To determine the situation, on-site surveys were used as material.

### 3. Results and Discussion

*According to the results of the chi-square test;*

A statistically significant relationship was found between gender and preferred shopping malls ( $p < 0.05$ ). While 100% women preferred Kule Site and 80% women preferred M1 as a shopping mall, Kent Plaza and Novada were preferred by 100% men.

A statistically significant relationship was found between age and preferred shopping malls ( $p < 0.05$ ). Shopping mall Kule Site is 76.9% between the ages of 18-34, M1 is 100% between the ages of 35-49, Novada is 54.2% between the ages of 35-49, Kent Plaza is 64%, 3 percent preferred between 50-64 years old.

A statistically significant relationship was found between the settlement (the place of residence) and the preferred shopping malls ( $p < 0.05$ ). The shopping mall Kule Site was preferred by Selçuklu district with 53.8%, M1 by 100% Selçuklu district, Kent Plaza by 100% Selçuklu district and Novada by 100% Selçuklu district.

A statistically significant relationship was found between education level and preferred shopping malls ( $p < 0.05$ ). The shopping mall Kule Site was preferred by high school graduates with a rate of 59.6%, M1 with a rate of 100%, university graduates with a rate of 66.7% for Novada, and university graduates with a rate of 92.9% for Kent Plaza.

A statistically significant relationship was found between income status and preferred shopping malls ( $p < 0.05$ ). Those who own the shopping mall Kule Site with 61.5% income of 9000-12000 TL, M1 with 100% income level of 9000-12000 TL, Novada with 100% income level of 9000-12000 TL and Kent Plaza with

64.3% Those with an income level of 9000-12000 TL preferred.

A statistically significant relationship was found between occupation and preferred shopping malls ( $p < 0.05$ ). The shopping mall Kule Site was preferred by 78.8% civil servants, M1 by 100% civil servants, Novada by 45.8% by housewives and Kent Plaza by 42.9% by students.

A statistically significant relationship was found between shopping malls preferred due to preference ( $p < 0.05$ ). The shopping mall Kule Site was preferred by those who were close to 90.4% of their houses, those who found the M1 easily accessible 100%, those who found Nova easy to get around 58.3%, and those who wanted the presence of an elevator and ramp 100% at Kent Plaza.

A statistically significant relationship was found between transportation and preferred shopping malls ( $p < 0.05$ ). The shopping mall Kule Site was preferred by the Tramway with 65.4%, the M1 by 100% handicapped cars, Novada by 100% and Kent Plaza by 100% handicapped car users.

A statistically significant relationship was found between the environment quality and preferred shopping malls ( $p < 0.05$ ). The shopping mall considers Kule Site 36.5% normal and 36.5% good, M1 100% good, Novada 50% good and 50% very good, and Kent Plaza 92.9% Those who found the rate very good preferred it.

A statistically significant relationship was found between the existing disabled equipment and preferred shopping malls ( $p < 0.05$ ). Those who found the shopping mall Kule Site 100% too little, 90% too little for M1, 87.5% less for Nova, and 50% enough for Kent Plaza preferred it.

A statistically significant relationship was found between maintenance and preferred shopping malls ( $p < 0.05$ ). Those who found the shopping mall Kule Site 46.2% normal, the M1 normal 70%, Novada well-maintained 100% and Kent Plaza 57.1% well-maintained preferred it.

A statistically significant relationship was found between ease of use and preferred shopping malls ( $p < 0.05$ ). Those who found the shopping mall Kule Site to be normal 44.2%, M1 100% good, Novada good 66.7% and Kent Plaza 92.9% very good preferred it.

A statistically significant relationship was found between shopping mall quality and preferred shopping malls ( $p < 0.05$ ). Those who find the shopping mall Kule Site 36.5% normal and 36.5% good, M1 100% good, Nova 50% good and 50% very good, and Kent Plaza 92.9% very good preferred.

As seen in table 1, a statistically significant relationship was found between access and preferred shopping malls ( $p < 0.05$ ). Those who found the shopping mall Kule Site to be normal 44.2%, M1 100% good, Novada good 66.7% and Kent Plaza 92.9% very good preferred it.

Table 1  
Preferred Shopping Mall and Social Indicator Relationship Evaluation

N:100		Kulesiten=52	M1n=10	Novadan=24	Kent plazan=14	P-value
		n(%)	n(%)	n(%)	n(%)	
Gender	Woman	52(100)	8(80)	-	-	<0,001
	Man	-	2(20)	24(100)	14(100)	
Age	18-34	40(76,9)	-	-	-	<0,001
	35-49	12(23,1)	10(100)	13(54,2)	-	
	50-64	-	-	11(45,8)	9(64,3)	
	65+	-	-	-	5(35,7)	
Residential	Karatay	9(17,3)	-	-	-	<0,001
	Meram	15(28,8)	-	-	-	
	Selçuk	28(53,8)	10(100)	24(100)	14(100)	
	Other	-	-	-	-	
Education	Primary school	21(40,4)	-	-	-	<0,001
	High school	31(59,6)	10(100)	-	-	
	College	-	-	8(33,3)	-	
	University	-	-	16(66,7)	13(92,9)	
	MSc.-PhD	-	-	-	1(7,1)	
Income	0-6000	9(17,3)	-	-	-	<0,001
	6000-9000	11(21,2)	-	-	-	
	9000-12000	32(61,5)	10(100)	24(100)	9(64,3)	
	>12000	-	-	-	5(35,7)	
Working condition	Employee	11(21,2)	-	-	-	<0,001
	Officer	41(78,8)	10(100)	4(16,7)	-	
	Housewife	-	-	11(45,8)	-	
	Student	-	-	9(37,5)	6(42,9)	
	Unemployed	-	-	-	5(35,7)	
	Retired	-	-	-	3(21,4)	
Reason for Preference	Close to House	47(90,4)	-	-	-	<0,001
	Easy to access	5(9,6)	10(100)	9(37,5)	-	
	Easy to navigate	-	-	14(58,3)	-	
	Lift/Elevator	-	-	1(4,2)	14(100)	
Transport	Ramp	34(65,4)	-	-	-	<0,001
	Tramvay	4(7,7)	-	-	-	
	Bus	3(5,8)	-	-	-	
	Minibus	11(21,2)	10(100)	24(100)	14(100)	
Quality	Too bad	4(7,7)	-	-	-	<0,001
	Bad	10(19,2)	-	-	-	
	Normal	19(36,5)	-	-	-	
	Beautiful	19(36,5)	10(100)	12(50)	-	
	Very nice	-	-	12(50)	13(92,9)	
	Indecisive	-	-	-	1(7,1)	
Equipment	Too bad	52(100)	9(90)	-	-	<0,001
	Bad	-	1(10)	21(87,5)	-	
	Normal	-	-	3(12,5)	7(50)	
	Beautiful	-	-	-	3(21,4)	
	Very nice	-	-	-	2(14,3)	
	Indecisive	-	-	-	2(14,3)	
Care	Too bad	9(17,3)	-	-	-	<0,001
	Bad	19(36,5)	-	-	-	
	Normal	24(46,2)	7(70)	-	-	
	Beautiful	-	3(30)	24(100)	8(57,1)	
	Very nice	-	-	-	5(35,7)	
	Indecisive	-	-	-	1(7,1)	
Ease	Too bad	5(9,6)	-	-	-	<0,001
	Bad	9(17,3)	-	-	-	
	Normal	23(44,2)	-	-	-	
	Beautiful	15(28,8)	10(100)	16(66,7)	-	
	Very nice	-	-	8(33,3)	13(92,9)	
Quality	Indecisive	-	-	-	1(7,1)	<0,001
	Too bad	4(7,7)	-	-	-	
	Bad	10(19,2)	-	-	-	
	Normal	19(36,5)	-	-	-	
	Beautiful	19(36,5)	10(100)	12(50)	-	
	Very nice	-	-	12(50)	13(92,9)	
Access	Indecisive	-	-	-	1(7,1)	<0,001
	Too bad	5(9,6)	-	-	-	
	Bad	9(17,3)	-	-	-	
	Normal	23(44,2)	-	-	-	
	Beautiful	15(28,8)	10(100)	16(66,7)	-	
	Very nice	-	-	8(33,3)	13(92,9)	

#### 4. Conclusion

In every building and design around us, care should be taken to ensure that it meets the needs of every human being, regardless of age, gender and disability. It should not be forgotten that every person can be a candidate for disability.

According to the results of the survey, disabled individuals at all age levels were taken into consideration. Kule Site constitutes most shopping mall preferences in Konya. The biggest reason for choosing this shopping mall is that it is easy to access.

They mostly go to shopping malls by their own means. They prefer the tram most from public transportation vehicles because, ready ramp etc. They can get on and off without needing anyone. Their second preferred means of public transportation is the bus because; Having a ramp makes it easy to get on and off. Due to the narrowness of the ramp and the area, they prefer the minibuses less.

They use the shopping malls only to take their receivables and leave.

The equipment that the shopping malls want to have in them, if any, is the battery charging station and elevators. They do not need a companion very much.

They stated that they are very disturbed by the fact that people who are very healthy than themselves park in the parking lots for the disabled in the garden of the shopping malls and they want the disabled parking lots to be increased. They stated that the indoor and outdoor seating areas will be supported by wooded areas, providing a nice environment to get rid of the concrete piles.

They stated that the elevators were generally sufficient, but they complained about waiting in line at the Tower Site.

The entrances, exits, sinks and toilets of the shopping malls are designed for the disabled. They stated that it is usually normal in the transitions between the departments, but some of the departments are left too narrow without being aware of it and they experience difficulties in the transition.

They expressed that those who park vehicles in disabled parks, sidewalks and ramps should empathize and learn from their misbehavior.

It should not be forgotten that all people are equal and by removing the barriers, disabled individuals also take part in social life like healthy individuals. It is the duty of the whole society, especially designers and managers, to take the necessary measures for disabled individuals to benefit from these rights.

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