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An Assessment of the Functioning of Shopping Centres in Central-Eastern Europe on the Example of “Posnania Mall” in Poznań (Poland) and “Grand Mall” in Varna (Bulgaria)⁶

Abstract: The article explores the issue of the function of shopping centres, in particular the analysis of the impact of their presence on society and the local development of cities and regions. Regarding the empirical aspect, the examples of Poznań (Poland) and Varna (Bulgaria) will be presented. As a result of similar socio-economic conditions and joining the European Union at almost the same moment, all comparative studies reflecting preferences and market reactions seem both viable and interesting. In addition, the two cities chosen for the studies occupy a similar place in the hierarchy of the settlement network in their countries. They are large, well-developed centres that attract the attention of investors from various segments of the real estate market. The research is part of the modelling of preferences of shopping centre customers areas, which in particular supports the investment decisions of developers operating in the analysed real estate market, and at the same time permits a diagnosis of social satisfaction. A derivative of the research is also the reconstruction of the effects of the functioning of large-scale shopping malls in two Central-Eastern European countries.

Keywords: assessment, shopping centres, shopping malls, commercial real estate, Central-Eastern Europe

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1. Introduction

The development of commerce in Bulgaria and Poland is currently experiencing dynamic growth thanks to privatization and private entrepreneurial initiatives. As a result of these factors, the number of traders, commercial establishments, people employed, and commodity turnover have increased exponentially. In the states of Western Europe over the last thirty years, there has been a decrease in the number of retail establishments due to an increase in retail space. This constitutes an increase in total square metres and subsequently expands the retail space of the establishments. This has been accomplished due to the rapid and lasting processes of the consolidation and concentration of the commercial network. Therefore, primarily large convenience stores, shopping centres and complexes have been built [1]. This process is more clearly discernible in Bulgaria and Poland over the span of the last 10 years. The number of small-scale shops has decreased while there has been a tremendous demand for building and opening bigger scale establishments. The trend points towards a centralization of trade in food and non-food products, catering and recreational establishments and the services sector, all of them featuring in shopping centres also known as “malls”.

Historically speaking, traditional shopping centres offered a place where a community would gather to shop, feed and have leisurely activities [2]. In recent years, a new global trend has emerged which repurposes the idea of “the mall” from traditional shopping focused on department and specialized stores to a new kind of shopping which includes appliances and electronics stores which sell large local brands, individual sites, exciting new catering and food concepts (vegan restaurants), bigger and more complex forms of entertainment, modern film theatres, water parks and walkways, all contained on separate levels. The shopping centre carries great significance for the community. It is a place for meetings and the sharing of experience, leisure, business innovations as well as for acquiring revenue which aids different state institutions.

The paper is based on a comparative analysis of the socially expected and accomplished effects induced by the opening and exploitation of the largest trading centres Poznań (Poland) and Varna (Bulgaria) (Tab. 1).

The aims of this article will be achieved by asking the surveyed participants to answer the following questions: “What are your concerns and worries in regards to the upcoming construction of the new shopping centres “Grand Mall” in Varna city and “Posnania” in Poznań as well as what they could be after their completion?” and “What were your expectations and honest feelings towards the upcoming construction of the new shopping centres as well as what they could be after their completion?”

On the basis of the results obtained, a summarized analysis will be presented which constitutes customer satisfaction in both cities as well as a comparative analysis of the satisfaction levels for both municipalities.

Table 1. Essential characteristics of the “Posnania” and “Grand Mall” shopping centres

Characteristics	“Posnania”	“Grand Mall”
Location	Poznań (Poland)	Varna (Bulgaria)
Year of construction and put into operation	2016	2010
Investment [mln euro]	265	130
Developer	APSYS GROUP	ORCHID DEVELOPMENTS GROUP
Owner	APSYS GROUP	ORCHID MULTI COMPLEX – VARNA
Manager	APSYS GROUP	ORCHID MULTI COMPLEX – VARNA
Gross floor area [m ²]	320 000	152 215
Commercial area [m ²]	100 000	50 000
Type and number of commercial properties	220 boutiques, 40 cafes, restaurants, 40 medium and large-format stores	more than 180 shops
Brands	local and international brands (incl. individual concept story of well-known and respected designers and more than 20 luxury brands)	more than 30 world-famous brands
Parking spaces	3 300	1 750

2. Literature Review – Trading Centre, Types and Elements

The modern world is increasingly difficult to understand due to sudden, unexpected and discontinuous changes. Ever-increasing market changes contribute to economic uncertainty and impermanence [3]. The real estate market is a difficult to understand and complex phenomenon. Direct investment in the real estate market can take place in each of its market segments, i.e. in the residential, commercial, industrial, agricultural and special purpose segments [4]. The attractiveness of investing in real estate is of great significance due to the focus on its importance for economic growth and employment [5]. The opportunity to resell or use an item of property for different purposes simultaneously or in succession is also considered desirable (a multi-purpose property). The multi-purpose of property exerts a significant influence over its profitability.

Business properties are rich in variety and complex which leads to very few results in the references that offer an unambiguous classification of these establishments. Each separate group can be divided into subgroups. Different types of business properties include: industrial, office, commercial, hospitality, recreational estates etc. Commercial properties include units that are used by retail and wholesale businesses and by firms for the distribution of goods. Retail establishments are characterized by a large variety of retail space types which range from 15 m². shops to specialized supermarkets and shopping centres with an area of 1000 m². Shopping centres, being the modern form of the development of retail business, combine in their own distinct way the concepts of shopping, entertainment, and multi-functionality [6]. Shopping centres of the “mall” variety are also classified as commercial properties.

One of the basic concepts of the shopping centre has been defined by The International Council of Shopping Centres (ICSC), created in 1957 in Chicago, which reads as follows:

A group of retail and other commercial establishments that is planned, developed, owned and managed as a single property. On-site parking is provided. The centre’s size and orientation are generally determined by the market characteristics of the trade area served by the centre. The two main configurations of shopping centres are malls and open-air strip centres.

According to their definition, malls are typically enclosed, with a climate-controlled walkway between two facing strips of stores. The term represents the most common design mode for regional and superregional centres and has become an informal term for these types of centres. The types of shopping centres include: neighbourhood centre, community centre, regional centre, superregional centre, fashion/specialty centre, power centre, theme/festival centre and outlet centre [7].

Various definitions of the term “shopping centre” can be found in the literature, some of which would be: a range of commercial or other economic units (positioned inside one or more commercial buildings), planned, designed, built, owned and managed as a single property (much like single commercial properties), with a separate car park (open or built in) attached to them [8]. Large shopping centres are based on the model of small individual stores connected by common areas that enable customers to move from one shop to another without exiting the centre. They can be shaped as gallery, atrium or ring and can be located on a single level or connect multiple levels [9].

A shopping centre (mall) is a spatial concentration of interconnected properties from the service and leisurely activity (recreational) sectors, built to achieve a unified and competitive market strategy – unified planning, realization, and management.

Elements of the shopping centre include [10]:

- commercial and recreational zones,
- “magnet” commercial premises,
- a mall (pedestrian zone),
- a car park,

- auxiliary traffic routes with an electronic aspect,
- auxiliary roads,
- buffer zones,
- highway rings and highways.

Shopping mall users are comprised of consumers and business entities whose main goal is to improve the quality of their lives [11]. The commercial and recreational zones are dependent on the size and type of retail space which help determine what type the shopping centre will be (district, regional, business, multifunctional etc.) With the rapid growth in the number of shopping centres in Malaysia, the competition among commercial retailers is seen as crucial. The changes in format, latest design and various types of users, makes shopping centre management more challenging [12]. “Magnet” commercial premises constitute competing businesses, all of which possess big and established retail market brands. They are part of the malls’ structure and are situated diametrically since the client comes because of them, while the rest of the smaller units are spread out between them. Therefore, all sites make use of the purchasing potential of the mall. The pedestrian zone has to fit a set of minimal parameters to be consistent with the customer’s desire for accessibility. The car park, the auxiliary traffic routes have to be separated and with easy access. With the increasing number of shopping centres and their strong impact on existing retail systems, the major urban challenge has become maintaining a balance in the market [13]. The auxiliary traffic routes go through buffer zones and have the intention of smoothly turning the dynamic (from the highway) into the static (to the car park) and back again for the sake of the visitors.

The profits and return on investment of commercial units such as malls are dependent entirely on customer satisfaction. The level of their satisfaction is the basis of the success of every shopping centre. In the references provided, there are many diverse studies focused on customer satisfaction related to shopping centres. Some examples are from Beijing, China, as the study addresses the comparative analysis of the levels of subjective satisfaction of the customer base in relation to green and conventional shopping centres and properties in Beijing [14]. Another study focuses on Complying with voluntary energy conservation agreements (I): air conditioning in Hong Kong’s shopping malls [15] – the impact of the climate inside the building on its influx of customers. There are also papers associated with field studies on thermal environment in six underground malls which were conducted in Nanjing, China, particularly from customer’s perspective [16]. Due attention also needs to be paid to studies of the type of *Using a productivity function based method to design a new shopping centre* [17] – new ideas for the design of modern shopping centres, *Events as community function of shopping centres: A case study of Hong Kong* [18] – how cultural events taking place in shopping centres affect citizens of a community such as Hong Kong’s and *Shopping centre clusters: Competition or synergies? The case of the region of Murcia (Spain)* [19] – the paper focuses on shopping centres in a city’s peripheries and on their neighboring large shops, their

competition and the preferences of Spanish clientele. In 2004, the Dutch central government decided to liberalise its restrictive retail policy, allowing the development of mega shopping centres. This study aims at eliciting consumers' preferences for these kinds of new developments [20]. Another paper focuses on developing a database of thermal comfort in naturally ventilated buildings in order to improve indoor air quality, mainly in hospitals and shopping centres in the largest island of the Indian Ocean [21]. A shopping centre, consuming approximately 5000 kVA under maximum load, in Johannesburg, Gauteng, was used as a case study to apply the proposed pre-assessment of a solar PV plant [22]. Investigating energy saving potential in a big shopping centre through ventilation control [23] is a paper that focuses on researching energy saving measures and the flow of people in shopping centres. However, to date there do not seem to be any studies related to the satisfaction, concerns, and real sentiments of citizens before and after the construction of shopping centres.

3. Data and Methods

The methods which are to be used in this paper will be via survey, through sending said surveys, including a summary and a comparative method. The survey method constituted of sending out surveys with the purpose of gathering data on the expectations and fears before the opening of the "Posnania" shopping centre and the real, actual sentiments and fears 6 months after opening. The study includes four districts in Poznań: Polanka (including Katowicka Str. and Milczańska Str.), Tysiąclecia, Piastowskie and Oświecenia. The study on the "Grand Mall" in Varna (Bulgaria), which is an already established mall which has been active for several years now, also aims at accomplishing the same goal. In order to achieve the desired results, participants are to answer two blocks of questions, grouped before the opening of the shopping centre, which include the concerns and expectations before and after the opening, with fears and actual sentiments added.

The first block comprises questions related to:

- traffic jams in the direct vicinity of the shopping mall,
- parking problems,
- higher car traffic in the longer-distant neighbourhood of the shopping mall,
- excessive noise,
- mismatch of the shopping mall location (mismatch to the vicinity),
- incompatibility with the previous local spatial development plan,
- overly high density of people in the vicinity of the shopping mall,
- higher number of car accidents in the vicinity of the shopping mall,
- negative influence on the safety of people living in the neighbourhood of the shopping mall,
- negative influence on the quality of life of people living in the neighbourhood of the shopping mall.

The second block constitutes of:

- improvement of public spaces,
- wide gastronomic choice (restaurants, bistros, pubs, cafeterias),
- improvement of road infrastructure,
- wide cultural range (cinema, exhibitions, concerts, other events),
- intensification of investments in the vicinity,
- favourable commercial offer,
- availability of the brand-new shopping mall,
- general increase of city competitiveness,
- positive influence on the quality of life of people living in the neighbourhood of the shopping mall,
- safety increase in the vicinity of shopping mall.

Summary and comparative methods will be applied to present the empirical results obtained in the form of a summarized analysis of those results and a comparative analysis of customer satisfaction in both cities.

The general scheme of the research stages was the following:

- conceptualization of research problem,
- literature analysis in the area of the meaning, functioning and development of shopping malls in modern urban space,
- survey questionnaire preparation and testing,
- collecting responses from the survey,
- statistical analysis of the data obtained,
- deductive analysis concentrated on the empirical data from case studies in Poland and Bulgaria,
- discussion of study results,
- formulating final conclusions.

4. Empirical Results

After completing the study, the number of responses received in Poznań before the shopping centre was built were 129, as they were collected in the beginning of August and September 2016. Six months after the opening of the shopping centre (during the period of 29 March 2017 to 2 April 2017) 118 participants received their surveys and sent their replies regarding their current sentiments and fears. The study in Varna was conducted during March 2019, with the number of surveyed respondents being 130. The sample was characterized by selecting five age groups (Tab. 2).

The dominant age group surveyed before the construction of Poznań's shopping centre is between the ages of 31 and 40 – 28.68%, and after the unit's construction from 41 to 50 (29.46%). The dominant group in Varna is between 21 and 30 years old – 42.30%. The majority of the respondents who took part in the study are women. The survey before the opening of the shopping centre in Poznań was completed

by 77 women and 52 men. The majority of respondents (56%) had a secondary education. There were slightly fewer people with higher education (including bachelors) – 31%. The lowest number of respondents declared that they had a vocational education 23%. Most of the respondents are professionally active (74% of the total). Other groups of respondents are people learning or studying (20%) and unemployed (6%). The last group are pensioners (8%)⁷. The survey after the opening of the shopping centre in Poznań was completed by 64 women and 54 men. The majority of respondents had a secondary education (51% of the total). People with higher education (including BAs) were 31% of the total. The lowest number of respondents declared that they had a vocational education 23%. Most of the respondents are professionally active (77% of the total). Other groups of respondents are people studying at schools and studying in general (19%) and unemployed (4%). The last group are pensioners (8%). In Varna, a larger number of women were also surveyed – 88 women compared to 42 men. The participants in the study with higher education (which includes BAs, MAs, and PhDs) are 72,3%, while the surveyed with secondary education consist of 27,7%. Most of the respondents are employed 51,5%, university students are 35,4%, entrepreneurs are 9,2%, while the unemployed are 1,5%.

Table 2. Number of respondents in the study in Poznań and Varna, separated by age groups

Age group	Poznań		Varna
	before being constructed	after being constructed	
18–20	22	12	14
21–30	28	32	55
31–40	37	29	22
41–50	34	38	29
Over 50	8	7	10
Total	129	118	130

Respondents answered two blocks of questions. The first block was: **What are your concerns about the construction of the new shopping centre “Posnania” and what are they after its creation?** The first block consists of 10 questions/responses. The results of the surveyed participants from Poznań are presented in Figure 1.

⁷ The sum gives 108% – sometimes respondents choose two categories at the same time, e.g. studying plus unemployed.

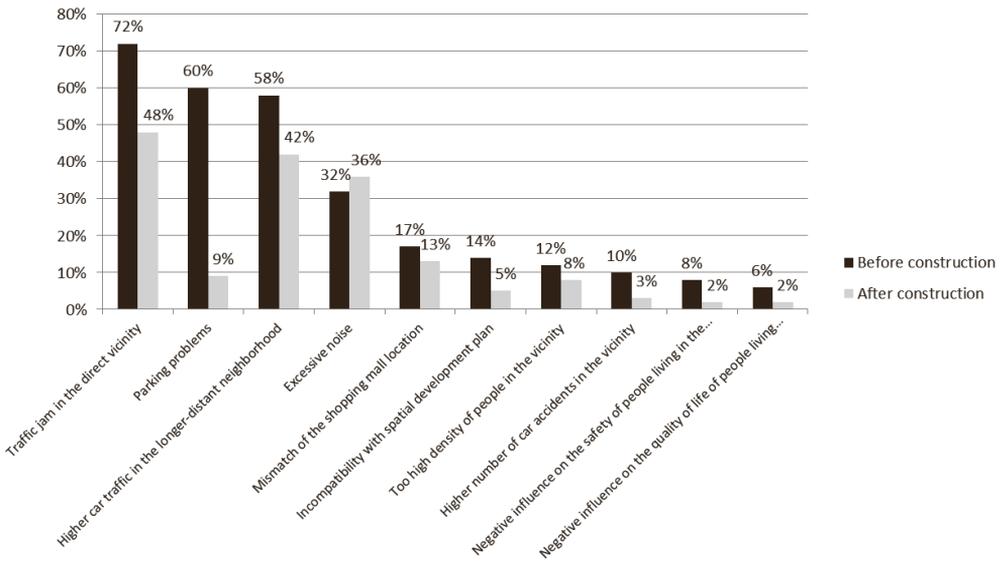


Fig. 1. “YES answers” in the category of concerns about the construction and after construction of the “Posnania” shopping mall

The data in Figure 1 suggests that the highest percentage of concerns before the shopping centre’s construction has been indicated as “Traffic jams in the direct vicinity of the shopping mall” – 72%. “Parking problems” represents their second concern (60%), followed by increased traffic in the longer-distant neighbourhood of the shopping mall (58%). The smallest worry was the negative influence on the quality of life of people living in the neighbourhood of the shopping mall (6%), as well as the negative influence on the safety of people living in the neighbourhood of the shopping mall (8%).

After the opening of the shopping centre, their concerns were once more related to traffic jams in the direct vicinity of the shopping mall – 48%, as well as higher car traffic in the longer-distant neighbourhood of the shopping mall – 42%. The lowest percentages of their concerns once again lie mainly in the negative influence on the quality of life of people living in the neighbourhood of the shopping mall – 2%, and the negative influence on the safety of people living in the neighbourhood of the shopping mall – 2%, however the percentage ratio is much lower.

The second block was: **What are your expectations related to the construction of the new “Posnania” shopping centre and after its creation what are your actual feelings?** The second block consists of 10 questions/responses. The results of the surveyed participants from Poznań are presented in Figure 2.

The data from Figure 2 indicates that the highest percentage of expectations of the surveyed participants before the construction of the shopping centre were related to the improvement of public spaces – 73%, succeeded by wide gastronomic

options of restaurants, bistros, pubs, cafes – 67%, as well as an improvement of road infrastructure – 64%. The lowest percentage (16%) was the perception that safety would increase in the vicinity of the shopping mall and that it would have a positive influence on the quality of life of those living in the neighbourhood of the shopping mall (17%). After the opening of the shopping centre, respondents highlighted the gastronomic options of restaurants, bistros, pubs, cafes (74%), alongside the improvement of public spaces (63%), as the most popular options. Fewer benefits were seen in the intensification of investments in the vicinity (7%), and the general increase of city competitiveness (also 7%).

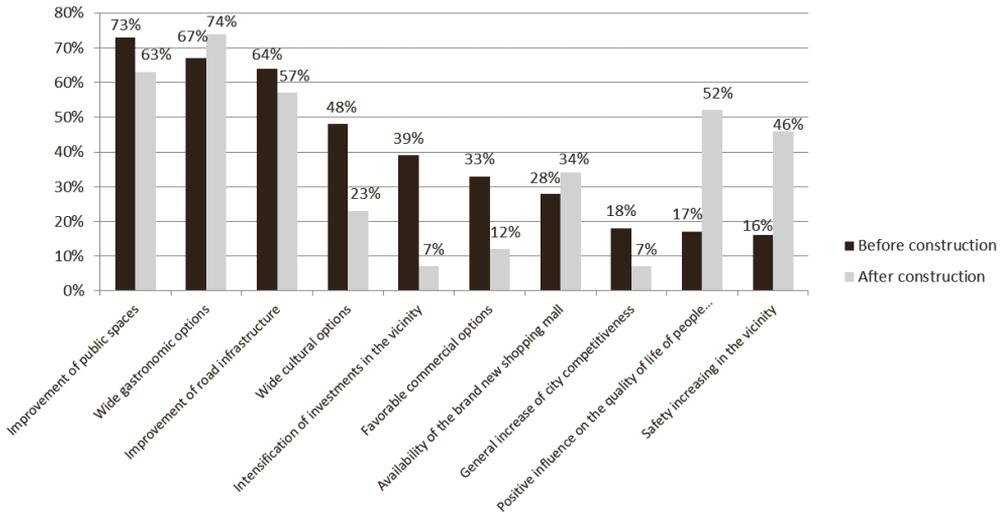


Fig. 2. “YES answers” in the category of expectations related to the construction of “Posnania” shopping mall and actual feelings related to the creation of shopping mall

The participants in the survey in Varna were provided with the same two blocks, respectively each of them being: “What are your concerns about the construction of the new “Grand Mall shopping centre” and what are they after its creation?” while the second one is “What are your expectations related to the construction of the new “Grand Mall” shopping centre and after its creation what are your actual feelings?”. The results from the study are provided in Figures 3 and 4.

The main concerns of the surveyed participants in the study before “Grand Mall’s” shopping centre’s construction in Varna seem to be “traffic jams in the direct vicinity of the shopping mall” – 84%. Those are followed by expected parking problems and higher car traffic in the longer-distant neighbourhood of the shopping mall (48% each). The lowest amounts of concern before the shopping centre were built are indicated by the incompatibility with the previous local spatial development plan and the negative influence on the quality of life of people living in the

neighbourhood of the shopping mall as well as the negative influence on the safety of people living in the neighbourhood of the shopping mall. After its completion, the respondents highlighted the same concerns as before the unit was built.

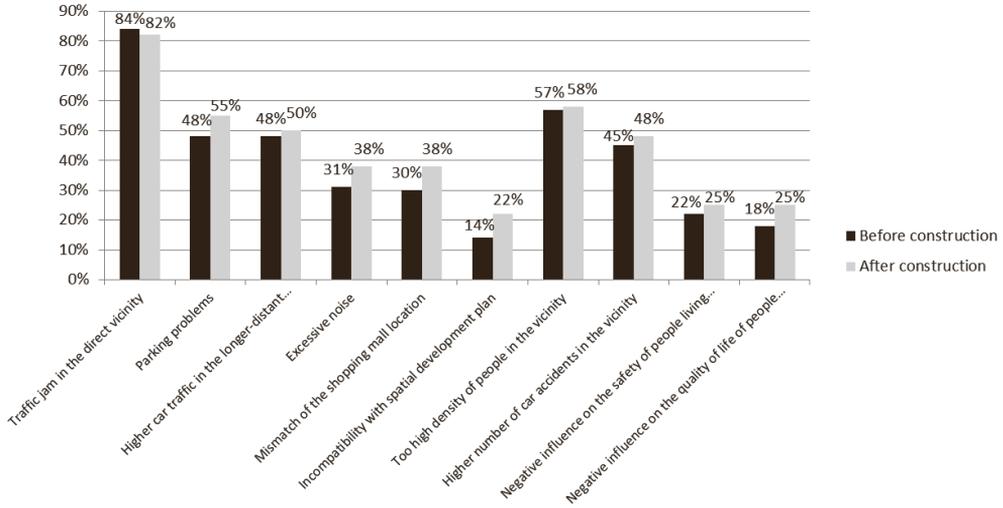


Fig. 3. "YES answers" in the category of concerns about the construction and after construction of the "Grand Mall" shopping mall

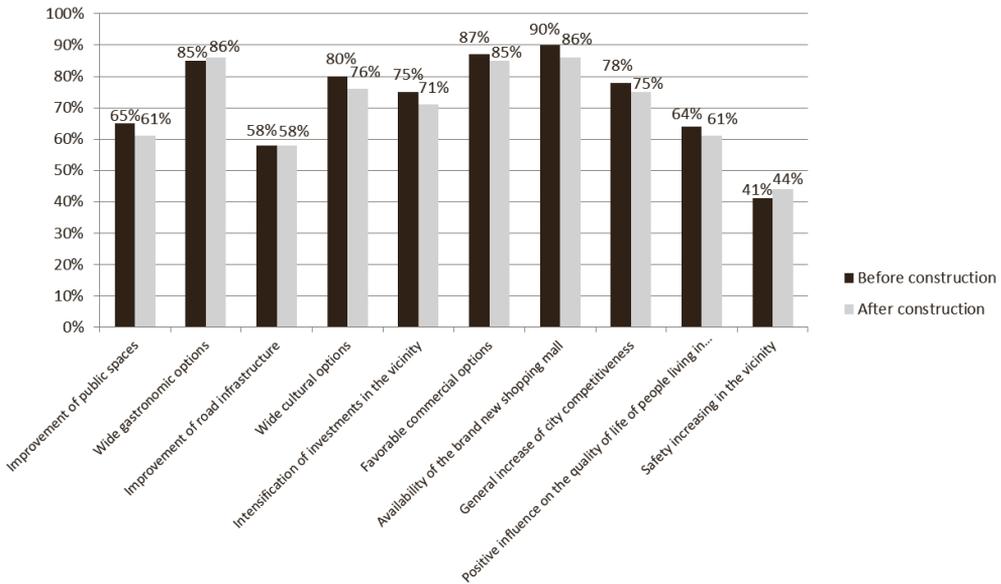


Fig. 4. "YES answers" in the category of expectations related to the construction of the "Grand Mall" shopping mall and actual feelings related to the creation of shopping mall

The expectations of the surveyed participants before the shopping centre were built display the highest percentages pertaining the availability of the brand-new shopping mall – 90%. This is the highest percentage acquired in the entire study when it comes to indicators, according to which the maximum value is required [24]. The respondents also expressed their expectations towards favourable commercial options – 87%, along with wide gastronomic options of restaurants, bistros, pubs, cafeterias – 85%.

The other categories involving improvement of public spaces, improvement of road infrastructure, broader cultural options (cinema, exhibitions, concerts, other events), intensification of investment in the vicinity, a general increase of city competitiveness, as well as a positive influence on the quality of life of people living in the neighbourhood of the shopping mall, are also with high indexes (over 60%). 41% selected an increase in safety in the vicinity of shopping mall. The percentages acquired by the participants in the second part of the study in regards to their real sentiments after the mall were built overlap, with a 1 or 2% difference in results linked to their expectations before the “Grand Mall” was built. The data clearly reveals that the expectations and real sentiments before and after the opening of the shopping centres are identical among respondents.

The comparison of data acquired by the two studies carried out in the “Posnania” and “Grand Mall” shopping centres displays that in the period before their creation people had the biggest concerns about traffic jams in the direct vicinity of the shopping mall which would be attributed by the flow of entering and exiting vehicles of clients of the unit, especially during peak hours of the day. The lowest concerns before “Posnania” was built were determined to be the negative influence over the quality of life of people living in the neighbourhood of the shopping mall, while the surveyed participants in the Varna study selected the incompatibility with the local spatial development plan as the least of their concerns i.e. they supported its placement and positioning in the city.

The expectations of citizens related to the shopping centres’ upcoming creation, display yet another disagreement between the two groups. From the Poznań sample, the highest result is stated to be the wide options of restaurants, bistros, pubs and cafes while Varna’s indicates availability of the brand-new shopping mall as the most preferable choice i.e. the respondents find the idea of a new shopping centre emerging in the city to be favourable.

After the construction of the shopping centre, participants in both cities unanimously chose the traffic jams in the immediate vicinity as the greatest cause of concern. Their real sentiments after the shopping centre was built are also mutual – the creation of a wide range of options of restaurants, bistros, pubs and cafes having the top percentage. Varna’s respondents also have the same result when it comes to the availability of the brand-new shopping mall.

2019 was marked by the opening of a new shopping centre in Varna (Delta Planet Mall) which increased the retail stock in the city to 123,000 m², making Varna

the city with the highest retail space provision rate in the country. In Q4 2019, the stock of retail space in modern shopping centres in Bulgaria is 817,200 m², of which 411,400 m² are in Sofia. For every 1,000 inhabitants of Varna, there are 341 m² of retail space while the figure for Bulgaria's capital, Sofia, is 285 m² for every 1,000 citizens [25].

5. Conclusion

The retail market is constantly changing, influencing economic and social factors. Over the years, investments in business real estate such as "malls" have proven to be very effective and profitable which proves that the availability of a preliminary social study on citizen satisfaction when it comes to new shopping centres is very important for investors, as well as for the municipality and region.

After completing a thorough study on the socially expected and achieved effects caused by the opening and exploitation of the largest shopping centres in Poznań and Varna, it is clear that the citizens of both cities view traffic jams in the direct vicinity of the shopping mall as their biggest concern before and after the construction of the shopping centres. Their expectations and real sentiments after the malls' construction are related to the improvement of public spaces in Poznań, while the availability of a brand-new shopping mall seems to be the case in Varna. In both cities, however, participants saw the increased options of restaurants, bistros, pubs and cafes as desirable.

Generally, a higher level of expectations and positive feelings related to the functioning of "Grand Mall" in Varna was reported by respondents than in the case of the "Posnania" shopping mall. The most reasonable explanation of such a situation is the high number of shopping centres in Poznań. There are two other large shopping malls at a distance of 2 km from "Posnania". Also, the total number of such commercial facilities is appreciably higher in Poznań than in Varna, which is probable the source of the lower expectations and feelings expressed by respondents from Poland.

The evolution of shopping centres has been the main focus of stationary trade for decades. The upcoming evolution will bring new and exciting experiences that will help distinguish the next decade from the last. Retail is a developing ecosystem which allows consumers to study and experience brands while malls are one of its most important hosts for that experience. On the other hand, the crisis resulting from the COVID-19 pandemic poses new challenges for the management and operation of these properties. We are in a changing environment which is mainly characterized by uncertainty and problems in planning activities (business, profitability, employees, customer flow, etc.). Simultaneously, however, we are witnessing new realities associated mainly with the transformation of processes, more digitalization and electronic services.

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