

ECOLOGY IN MARKETING OF THE CITY AND ATTACHMENT OF RESIDENTS – BASED ON SELECTED CITY

Małgorzata KOSZEMBAR-WIKLIK

Politechnika Śląska, Wydział Organizacji i Zarządzania; malgorzata.koszembar-wiklik@polsl.pl,
ORCID: 0000-0002-8603-1646

Purpose: The cognitive article purpose was to indicate significance of pro-ecological actions in a city for creation of a city attachment. The research purpose was to define a significance and perception of ecology in a city among different inhabitant groups.

Design/methodology/approach: The inquiry sounding method was applied for this research, using a direct or internet questionnaire sent by e-mail, carried out among Sosnowiec city inhabitants. The sample was selected non-random and purposeful. The research was attended by all the people registered in the city, in the age from 18 to 86 years, divided to 5 age-groups.

Findings: Majority of respondents declare that the pro-ecological city image is important for them, but they rarely look by themselves for information about ecological actions taken in the city. They notice best the pro-ecological city's actions in the ecological city's communication area. Inter-generation differences are visible in case of a city attachment declaration. Weakest city attachment is declared by a group of young people for whom also improvement of environment status has a small importance.

Research limitations/implications: Research was carried among inhabitants of one city. Therefore, research conclusions can be generalized to no other interested group or city. Future research may be developed both in direction of larger city number and wider target groups: tourists, business representatives or City Council workers.

Practical implications: Research results indicate that the important aspect of city marketing, the authorities should especially take into consideration, is a communication with inhabitants. Majority of respondents don't look by themselves for information about ecological actions in a city and they cannot evaluate city authority information policy.

Originality/value: Green marketing is a quite strongly explored research area in the business subject aspect, while significantly less publications relate to the city's ecological marketing. This article includes problems relating to a city image, greens affecting its perception or issues relating to attachment to a domicile. This elaboration is directed to all the people interested in ecology problems in the city and to authorities of other cities, responsible for marketing policy, including ecology.

Keywords: ecology, green marketing, city image, city attachment.

Category of the paper: research paper, literature review.

Introduction

Approach to the ecology problem becomes today one of the most important aspects of a city image shaping. City image carefulness became, within last years, important territory marketing element. City as a marketing subject is a combination of material and immaterial, human and objective resources, arranged and governed, aimed for performance of defined tasks, products or services in order to meet both its own and receiver's needs (Rurański, Niemczyk, 2013). One of the strategic marketing aims of any territorial unit is shaping of the expected image in receiver's consciousness. A. Szromnik says that „the city image is the whole of subjective reality image, performed inside human minds, due to perception, mass-media transfer influence as well as informal information transfers. Image – the mental city image, its internal reflection in minds of different units or social groups, therefore it's just only filtered, mental representation of a city's reality” (Szromnik, 2016, p. 134). Next, as the directional aims of a spatial unit marketing, there may be used a/o: shaping of a positive image of territorial units and adjoining areas, increase of the unit's attractiveness and competitiveness as compared to other ones, proper shaping and consolidation of so called „public services”, using of which is impeded for inhabitants or economic subjects (Szromnik, 2016). It should be taken into account that the image as a reflection shaped in human mind, has a subjective character. This image, for inhabitants, depends on among the others demographic and social features (Niemczyk, 2018). Shaping of a city image isn't a simple thing, because it's a complicated network process, where many actors are involved. Territorial marketing essences, aims and tasks on a city level show that its implementation requires different communication forms (Wiatrak, 2017). However, communication is only one of important city image creation aspects. According to H. Meffert the city image may be created basing on its identity. Meffert believes that the city's identity consists of three components: visual city identity, communication system and city's culture (Meffert, 1989). Visual identification system includes elements connected with all the symbols: logos, city arms, flags, colors, typography of the official and advertising materials, etc. System of communication with inhabitants and external interested bodies relates to information management, public relation communication and promotion. From the aspect of communication connected with shaping of the city's pro-ecological actions, this is an important element, modeling attitude of inhabitants and other adjacent groups and informing about city authorities' actions. However, the city culture is more complicated, consisting of local customs, traditions, standards or values, memory places, behaviors typical for given city, including values and behaviors connected with ecological attitude. The element, most difficult for definition and being a challenge for the city problems researchers, is a city culture.

City's image and mark are shaped also by city's architects, who significantly influence city's space visualization (Kizielewicz, 2013). City legibility (urbanistic space) is, acc. to K. Lynch, important condition of a good city's perception. He mentions several important aspects of urbanistic planning. City's space is created by pathways, borders, junctions, accents, which affect its image. It's important to plan such elements so that the city is legible, properly perceived and understood by users and it should create a place consciousness (Lynch, 2011). Such planning aspects are also the city's green forms. Moreover, the city perception process is strongly affected by sounds, aromas, structures to be sensed by touching, weather conditions, existence or lack of wind, rain or sun, air clarity or smog, calmness, relax possibilities (Dąbrowska-Budziło, 2002). Perception of the above mentioned conditions depends on a proper shaping of city's green. Unfortunately, very often city spaces deliver to users no positive esthetic feelings and do not meet their need (Loegler, 2011). A. Zachariasz notices that the city image is also evaluated by its green structure, and especially by different parks and green areas. For example, linear parks improve an urban landscape quality, join the green system elements, create ecological corridors, foster city urbanization. Small width causes that they are seen as safe ones, are easily accessible and encourage to recreation. City parks build a positive city image and are places for events, concerts, etc. Quarter or settlement parks are places for inhabitant meetings and integration, foster entering into social contacts. Thanks to their individuality and specifics they are the quarter distinguishing elements, causing this way an increase of a community identity with its domicile (Zachariasz, 2006).

Ecology in a city marketing and attachment to a domicile

The city image is more and more influenced by, represented by city's authorities, attitude to ecology question and its communication ways, which are shown in actions defined as ecological (environmental) marketing. Ecological marketing (green, environmental, eco-marketing) inscribes into a social and balanced marketing concept, which indicates a necessity of taking into account a whole society needs, not only those of business subjects or territorial units. The balanced marketing includes integrated environmental, economic or social and culture aims and is adjusted for building better present and future (Zaremba-Warnke, 2009). In the balanced development context, special attention is paid to a need of taking into account to a public space quality attributes, connected with quality of the natural environment elements such as water, air, flora & fauna, micro-climate or acoustic values inside city's spaces (Januchta-Szostak, 2011). The ecological marketing task, for a city is not only response to pro-ecological needs, but also shaping attitudes relating to a responsible use of natural resources and their protection in a city – care for fresh air, waste segregation, energy saving, green areas care, etc.

City marketing includes a wide range of tasks, and this is a long-term process the aim of which is to hold and attract the three city' target groups (Goovaerts et al., 2014). City marketing is directed to – first of all – inhabitants, investors and tourists. Inhabitants are the most important recipients of marketing actions taken by local authorities, which should create a territorial unit image as an attractive domicile, and this way shaping local identity amongst the inhabitants (Glińska, 2011). Especially ecological city marketing should be directed – first of all – to inhabitants because it relates directly their domicile, where they live and realize everyday activities, but also because inhabitants are significant group deciding the social city capital, transferring into a symbolic capital. J. Bartkowski notices that the social capital is a multidimensional and complex phenomenon. Its influence is wide-spread and not exactly uniform. However, it's a factor with great significance for local or regional development (Bartkowski, 2007). Also G. Gorzelak emphasizes a social capital significance – ability of cooperation, confidence, citizen society – for development of given region and other territorial units (Gorzelak, 2004). Disclosure of the social capital role opens prospects of designing new development strategies based on a human and social capital (Kotarski, 2013). City's social capital is one part of a symbolic capital. In turn the city's symbolic capital is a sum of social, economic, political, cultural and creative ones, affecting its success obtaining ability (Lis, Szerenos, 2009). P. Bourdieu, describing the basic capital types, made a particular distinguishing of a symbolic capital – as a highest form (Bourdieu, Wacquant, 2001). Symbolic capital is an ability to use the city achievements within its development areas, in such initiatives as, first of all: attracting of human capital, business, negotiating of its position within connection networks. City development strategies based on, in a large scale, social (human) capital require the city authorities to cooperate and encourage for “grass-roots” initiatives. Cooperation and consciousness of common responsibility for a city requires a confidence. City's social capital allows to use other capital forms and create relations, build connections, which lead to creation of a confidence. Therefore, social capital has large significance also during promotion of pro-ecological behaviors and city's ecological image.

Ecological consciousness of inhabitants and their attitude to the city decide its development. It must be treated as friendly one for external interested body well-being. Ch. Landry treats people like assets and pays special attention to a causative power of creative society combined with creative policy of city authorities. Greens in a city is the area, within which private initiatives are clearly visible. In no other city life branch appears so intensively visible private initiatives, e.g. flowers in windows and balconies or privately arranged and kept gardens next to houses or flats. Moreover Ch. Landry emphasizes influence of city policy on inhabitants creativity and innovativeness (Landry, 2013). Thus the technological solutions relating to environment protection in a city must be accompanied by inhabitant education. Similarly, even the most advanced “Smart City” shall not meet its purpose, if there's no “Smart Citizen and Education” function (Lacinák, Ristvej, 2017). The more so, as emphasized by L. Mierzejewska, some green areas located in the city centers disappear (Mierzejewska, 2001). More widely such

a problem is shown by J. Mencwel describing not only cementation of city markets, but also other areas (ravines, park lanes, etc.), which negatively affects both environment and people (Menclew, 2020). Increasing inhabitant care about environment, development of ecological identity mark ensures to city a possible enlarging of its competitiveness (Hui-Ju Wang, 2019). Different works emphasize influence of green areas in a city to a life quality of its inhabitants, resulting in a postulate of integration of dwelling and green areas, mainly by planting greenery inside dwelling areas. Green forms in a city are not only elements helping space orientation and deciding about the city public space value, but they also affect inter-personal relations and fulfil social functions. Social functions, in turn, affect attachment to a domicile (city). Attachment to a domicile is much more than a positive attitude to it; it's deriving a safety feeling and satisfaction from habitation in such place or from such possibility (Giuliani, 2003). As indicated by M. Lewicka, so far no uniform theory has been built relating to attachment to a domicile, following definitions are used interchangeably: place attachment, place identity, sense of place, place dependence, insideness, rootedness, belongingness, residence satisfaction, place identity and others (Lewicka, 2012). The „attachment” term itself was first defined by Daniel Stokols and Sally Shumaker as a „positive emotional bond between people and their inhabitation places” (Stokols, Shumaker, 1981). This is one-dimensional formula, next to which other, multi-dimensional ones exist. Lewicka defines, as the most popular, the two-dimensional attachment concept, including emotional attachment (place identity) and dependence on a domicile, thus instrumental attachment (place dependence) (Lewicka, 2012). David M. Hummon basing on primary research, defined 5 place attachment types:

- Everyday attachment (everyday rootedness) – specific for people born in given place, not considering its “pros and cons” and planning no removal.
- Active attachment (ideological rootedness) – specific for people inhabiting and working in given place, engaged in different actions for it, interested in its peculiarity and development, planning no removal.
- Territory relativity (place relativity) – specific for people born in given place, living their lives in several different places, being mobile and wanting to acquaint with new places.
- Alienation – specific for people who removed to given place from other region and who never accepted this place and will remove, if such opportunity exists.
- No place feeling (placelessness) – specific for people indifferent for their domicile, treating it just the same as any other place, similarly good for living (Hummon, 1992).

The three last types show their unattachment to a place (non-attached).

A. Bańka believes that it's worthy to invest in building connections between people and place, because positive bonds to a place are a condition of proper development in their lifetime cycles. Place attachment delivers to any individual a stability feeling amongst changes. Moreover, strong and positive bonds with a place are a condition of environment development, i.e. high accord between life quality in given environment and the environment needs (Bańka,

2014). Cultural unification of a western world fosters decreasing inclination of individuals for identification with given place or preferences for building identity basing on elements other than birthplace or actual inhabitation place (Lewicka, 2012). At present, the young generation shall, during its lifetime, probably change work many times, and consequently also inhabitation places. Similar functions fulfill still growing tourist industry, enabling removal between cities, countries or continents, which may add to become mentally independent from stable inhabitation. In result, such processes may find their mirroring in people's attitude to a place (Brzeziński, 2016). Frequent changing of living places may lead to shaping of, as defined by A. Trąbka, „nomadic approach to a space”, he says however, that even very intensive mobility not always leads to „unplacement” and total lack of a place attachment, but only to a shaping of an attachment types called “ideological” or “relativized” ones (Trąbka, 2018).

In the context of a problem connected with depopulation process relating to a large part of Polish cities within last years, depopulation stopping and increase of satisfaction level due to a given city becomes an important strategic actions element. In connection with such concepts of balanced development, social responsibility, green marketing, creation of pro-ecological city image becomes an important area of city's marketing actions.

Characteristics of Sosnowiec city

Depopulation problem is clearly visible in Polish cities, which they experience not only due to a low increase of population or external emigration, but also due to a people's migration from cities to countries (Zańko). Sosnowiec is one of the cities that suffer the decreasing population problem. This city belongs to Zagłębie Dąbrowskie region and precisely it's the eastern part of Silesian Voivodeship. It adjoins to Katowice, Będzin, Czeladź, Dąbrowa Górnicza, Sławków, Jaworzno and Mysłowice. The territorial surrounding of Sosnowiec city significantly affects conditions of its functioning because these cities create strongly industrialized city centers (Local Sosnowiec city revitalization program).

From beginning of the 1990-ties of XX century a permanent decrease of Sosnowiec city inhabitants number occurs. In the 1990 the inhabitant number was circa 260 thousand. From this time a permanent city depopulation occurs, resulting from a negative birth-rate and a negative migration balance.

The Sosnowiec Registry Office statistics data show that the children birth number in the 2020, as compared to 2019, decreased, while the demise number increased. The migration balance is still negative.

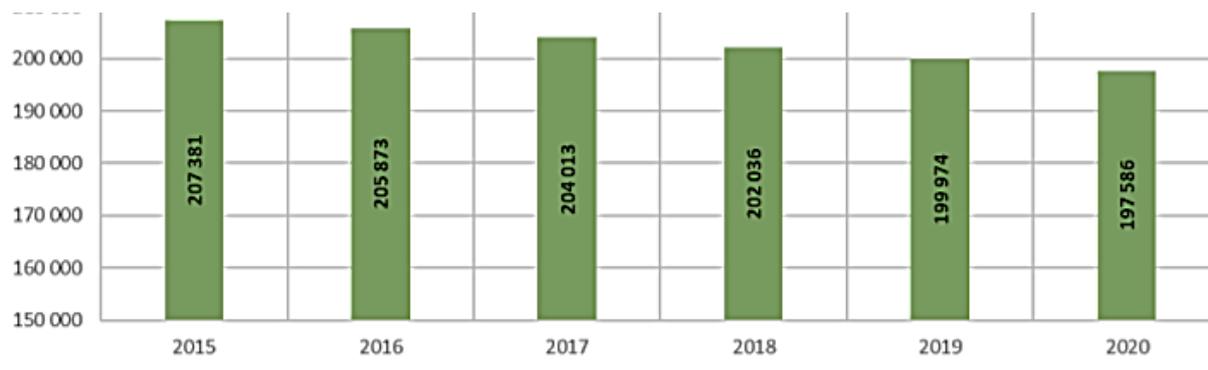


Figure 1. Sosnowiec city inhabitant number within the years 2015-2020 acc. to GUS. Source: Sosnowiec commune status report for the year 2020, [http://www.sosnowiec.pl/_upload/Raport%20o%20Stanie%20Gminy%202020%20\(31.05.2021\).pdf](http://www.sosnowiec.pl/_upload/Raport%20o%20Stanie%20Gminy%202020%20(31.05.2021).pdf).

Table 1.

Births, demises and migration balance in 2019 & 2020 in Sosnowiec city

Year	Births	Demises	Migration balance
2019	1.087	2.586	- 810
2020	931	2.953	- 744

Source: Sosnowiec commune status report for the year 2020, [http://www.sosnowiec.pl/_upload/Raport%20o%20Stanie%20Gminy%202020%20\(31.05.2021\).pdf](http://www.sosnowiec.pl/_upload/Raport%20o%20Stanie%20Gminy%202020%20(31.05.2021).pdf).

Inhabitant structure also shows that demographically this is a senescent city. The largest Sosnowiec inhabitant group are women in the age of 60-69 and 35-44 years, while in men the domination group is 35-44 years old and second largest group is 60-69 years old. Inhabitants of the unproductive age, for 100 people in a productive age was 73,4 people in the 2019 (Urząd Statystyczny w Katowicach).

Sosnowiec is a city with a relatively good economic situation. Beside the extinguishing economic specializations such as logistics or automotive sector, there are different branch enterprises existing on city's area: services, trade or production ones. General number of subjects registered within the Sosnowiec city area is over 20.000 (Raport o stanie gminy Sosnowiec).

What concerns the ecology, the most important challenge to be faced by Sosnowiec city is an air quality. The largest problem within the city area is, especially within the heating season, over-standard concentrations of suspended dust PM10, PM2,5, benzopyrene or nitric oxides. The pollution emission sources are solid fuels burned in house stoves or boilers as well as transport means and industry. Thus, it's necessary to take widespread actions aimed for limitation of low emission (Raport o stanie gminy Sosnowiec). For years Sosnowiec dedicates and expends large sums of money for modernization of heating systems.

Table 2.

Purpose subventions from Sosnowiec city budget for modernization of heating systems and installing systems using renewable energy sources within years 2016-2020

Subvention year	Quantity of financial means planned in a budget (PLN)	Quantity of expended financial means (PLN)	Quantity of rendered subventions	Quantity of liquidated coal burners
2016	78 673	538 070	162	282
2017	2 298 307	1 748 067	456	584
2018	3 011 293	2 471 612	358	687
2019	2 592 457	2 304 995	423	680
2020	2 610 487	2 096 820	352	568

Source: Sosnowiec commune status report for the year 2020, [http://www.sosnowiec.pl/_upload/Raport%20o%20Stanie%20Gminy%202020%20\(31.05.2021\).pdf](http://www.sosnowiec.pl/_upload/Raport%20o%20Stanie%20Gminy%202020%20(31.05.2021).pdf).

Beside the investments connected with improvement of air quality, the city takes also other initiatives aimed for improvement of natural environment or inhabitant life quality.

In frames of city investments within the year 2020, an adjudication was carried out for erection of Ecological Education Centre, Egzotarium in Sosnowiec and at present works are continued - investment to be completed till the end of 2022 (Raport o stanie Gminy Sosnowiec).

The pro-ecological actions taken by the city are a/o:

- Extension of pedestrian and bicycle paths.
- Extension of the public bike-hiring system.
- Revitalization of green areas.
- Investment into recreation parks.
- Enlarging of ecological, low-emission, electric or hybrid buses fleet (purchased thanks to participation in the project titled: “Clean Air over Zagłębie – purchase of electric buses together with loading infrastructure” realized in frames of Infrastructure and Environment Operation Program for the years 2014-2020).
- Purchase of 16 hybrid type plug-in buses, within the year 2021.
- Modernization and extension of new tram lines.
- Improvement of a road system capacity and this way improvement of traffic safety, decrease of negative influence and arduousness of road traffic (especially transit traffic), which means decrease of a fume volume in the city.
- Land development of city areas to the housing estate greens, performance of new pedestrian paths, planting of many trees, bushes and perennial plants.
- Assembly of nesting boxes for birds, bats or insects, revitalization of wet areas, Rów Kalny water basin.
- Revitalization of the Przemsza and Brynica river valley functioning area by extension of green areas.

In the year 2019 works were started, connected with preparation and elaboration of Commune Revitalization Program, which shall replace the present obligatory Local Revitalization Program for Sosnowiec City. They elaborated a delimitation of degraded and

revitalization areas in Sosnowiec. City's analysis was elaborated in the social, technical and economic aspects. In the year 2020 works on a Commune Revitalization Program have to be continued, but the social consultation carrying plan and inquiry research analysis were made impossible by pandemic. Therefore, work on Commune Revitalization Program was stopped (Raport o stanie Gminy Sosnowiec).

Sosnowiec city authorities try to encourage new people to inhabit the city. The New Inhabitant Card is issued. Each person, registered as a regular inhabitant of Sosnowiec, shall obtain a special card ensuring reduced prices for many city's institutions, both cultural and sport ones. Over 5,8 thousand of the New Habitant Cards were issued from the 2016 and 941 in the year 2020 itself (Raport o stanie Gminy Sosnowiec). The city also inform inhabitants about taken ecological initiatives, a/o such information is placed in city's internet sites, in city status reports or in reports about the condition of the city.

Ecology perception by city's inhabitants – research method and results

Important aspects affecting inhabitant identification with the city is a natural environment status and city authorities' approach to ecological problems. The elaboration presents part of sounding results, which best mirror attitude of inhabitants to this problem. The sounding purpose was to find how Sosnowiec inhabitants perceive its city in ecology categories and what attachment to the city they declare. The detailed purpose range allows finding:

- How important for inhabitants is the city's pro-ecological image?
- How they evaluate the city's authority information policy relating to a natural environment protection?
- In what areas they notice mainly pro-ecological actions taken in the city?
- What attachment to the city is declared by inhabitants?
- Can the improvement of natural environment status increase attachment to the city?

The research was carried out by inquiry method, using a direct questionnaire or internet one, sent by e-mail. Selection of a sample was non-random intentional – the responding population were adult people, registered in Sosnowiec. The research sample was 382, assumed maximum fault – 5%, confidence interval – 95%. The research was attended by people in the age between 18 and 86 years, divided to 5 age groups, with different habiting periods. All the data are shown in percentage and rounded to the whole. Among the respondets 39% lives in Sosnowiec from a birth, 37% very long – from several up to tens of years, 17% several years, 7% shortly (less than 3 years). Splitting to sexes – women – 53%, men 47%. Age structure of the inquired is shown in the Figure 2.

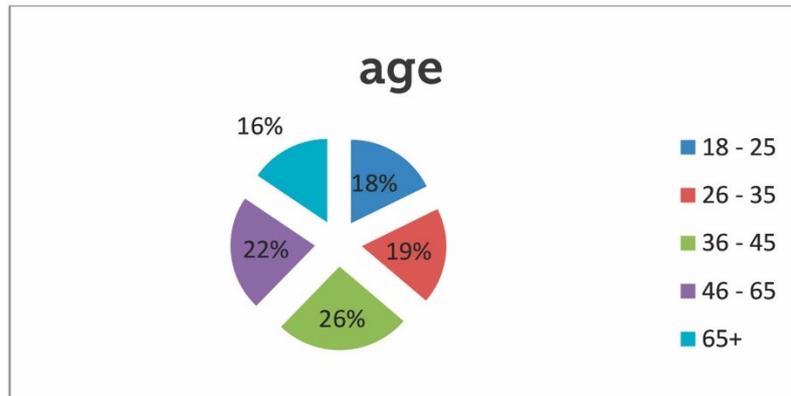


Figure 2. Age of the inquired. Source: own research.

Respondents were asked if they would define its city as an ecological one (carrying about environment)? Large part of them, from each age category, couldn't define if the city can be defined as ecological one (Figure 3). The most difficult was this question for people in the age of 65+ (38% - "hard to say"). Also, rarely extreme answers were selected – "absolutely yes" or "absolutely no". The group, which in maximum percentage describes the city in positive categories, are people in the age of 36-50 years, most negative answers did indicate the 26-35 years group (Figure 3).

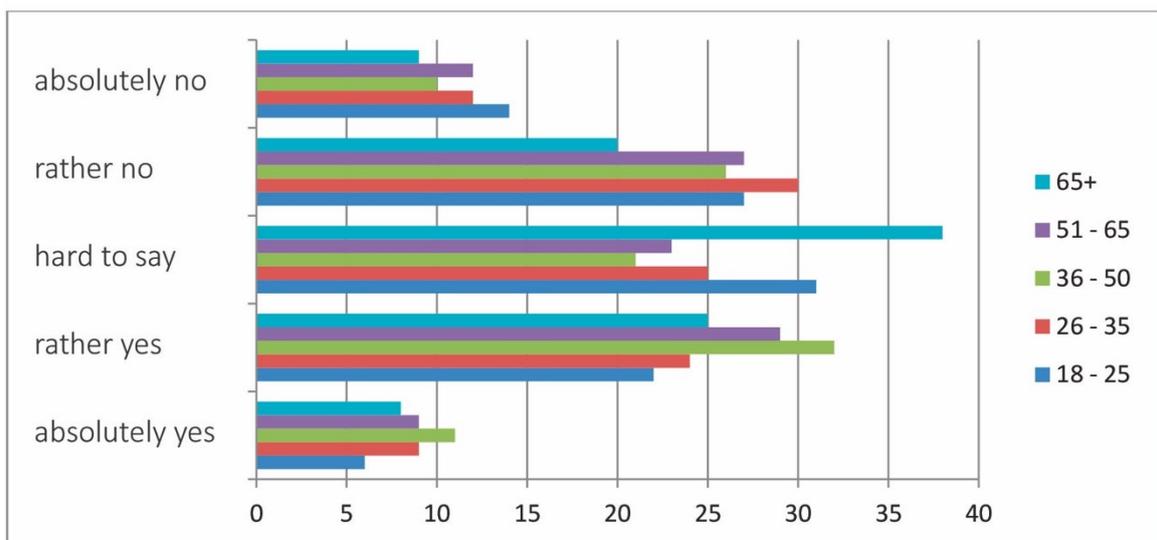


Figure 3. Would you define your city as ecological city (carrying about environment)? Source: own research.

Respondents were weakly interested in information relating to pro-ecological actions in the city. The group most interested in seeking information in this matter are people in the age between 36-50 or 51-65 lat. In each age category the „rather no” or „absolutely no” answers dominate (Figure 4).

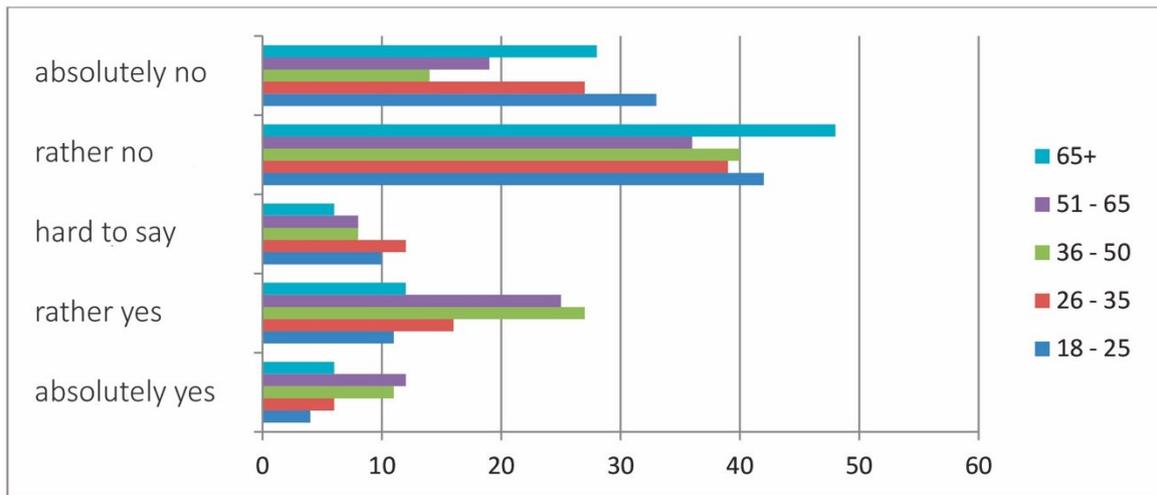


Figure 4. Are you personally interested (e.g. seeking information, reading news) in pro-ecological actions carried by the city authority? Source: own research.

Lack of active seeking an information about environment protection actions in the city results in a fact that majority of the inquired had no opinion about information policy of city authority in this range and they cannot define it. In average each third of respondents could not define the information policy and in the group of oldest people this part was up to 42%, while amongst the youngest it was 34%, (Figure 5) when they gave an evaluation, then most frequently it was quite safe answer „on the average” – dominating in each age group. The authority’s information policy was best evaluated by people in the age between 51 and 65 years.

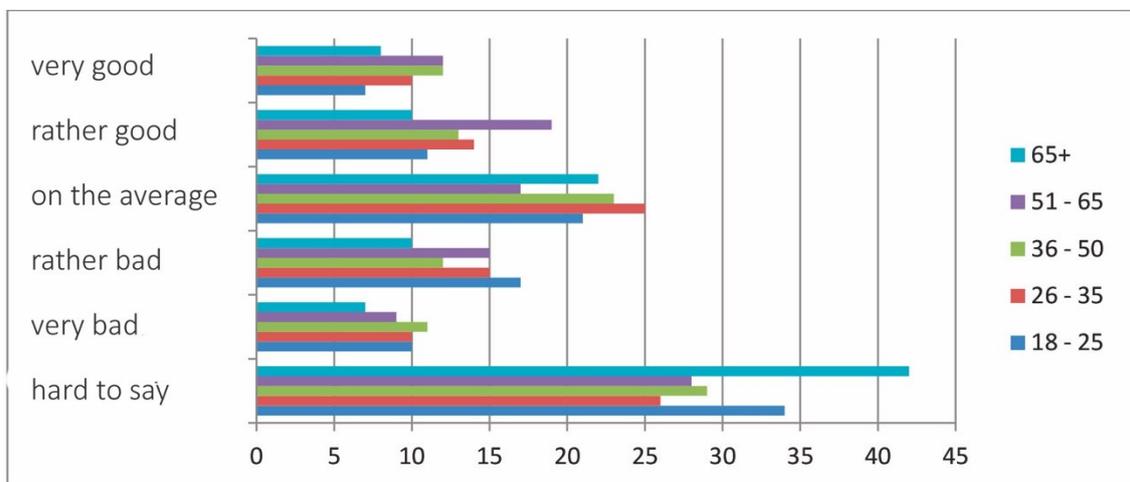


Figure 5. How do you evaluate city authority information policy relating to pro-ecological actions taken in the city? Source: own research.

Also in the city’s natural environment aspect, it was most frequently defined as “on the average”. The most difficult was this answer for young people in the age between 18 and 25 years, each third from this group (29%) selected the answer “Hard to say”.

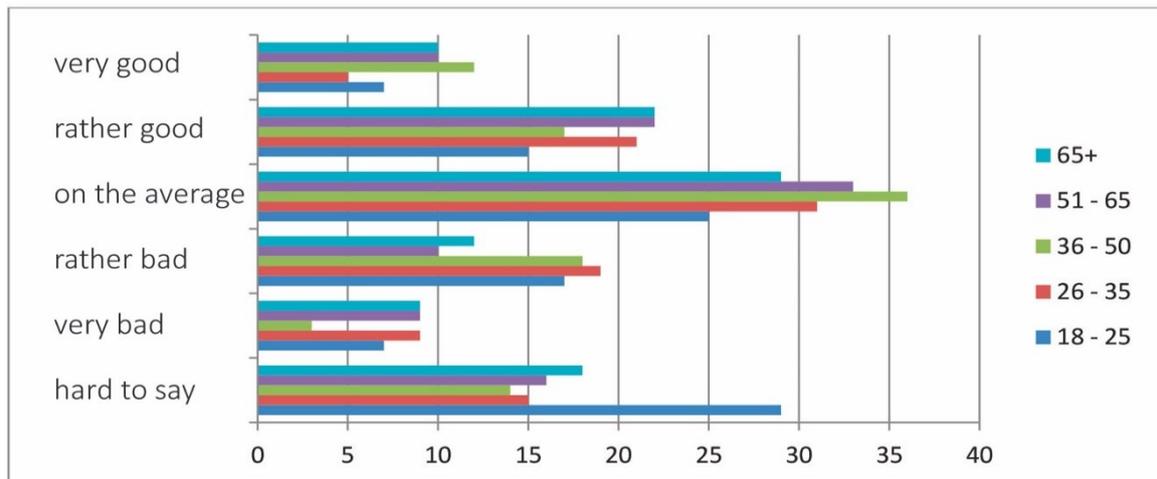


Figure 6. How could you generally evaluate the city's natural environment status? Source: own research.

Respondents could much better indicate pro-ecological action areas (selection from a list), 7% only selected answer "hard to say". What concerns to the most visible pro-ecological actions in the city, indicated by inhabitants, no significant difference was seen for particular age-groups. According to respondents the pro-ecological actions in the city are visible within the city transport development area (77%). Electric or hybrid buses are distinguished with a color, thus they are easily visible, moreover a lot of information can be found about development of ecological transport in the city. The second action, indicated by respondents, was upgrading of recreation parks (68%), next development of bike paths (54%) and city's bike hiring stations (44%), next revitalization of greens inside housing estates (37%) and greens planting (35%). More rarely (27%) respondents did indicate actions in the range of air quality improvement by surcharges to replacing the old stoves with the more ecological ones. These actions relate to a much smaller group of people and therefore it may result in much lower number of indications (Figure 7). Among the other actions, indicated by respondents themselves, waste segregation, creation of bus-passes, development of tram line, reconstruction of road in order to unload the traffic in the downtown and in housing estates or renovation of the Egzotarium were indicated most frequently.

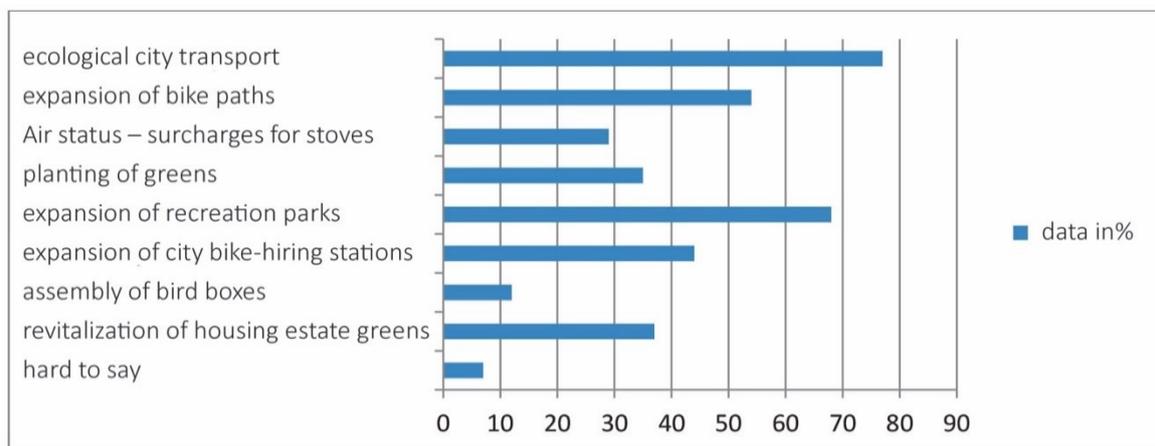


Figure 7. In which area the city's pro-ecological actions are best visible? Source: own research.

Declaration of respondents indicate that majority of them would like their city to have an ecological image. Groups, to which it is indifferent, are mainly the oldest (24%) and youngest people (21%) (Figure 8).

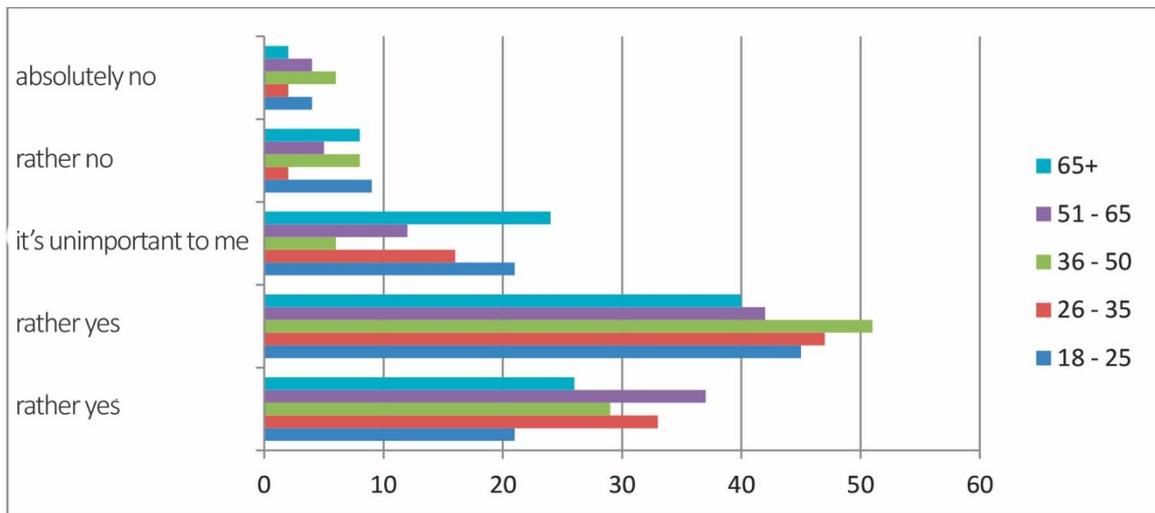


Figure 8. Would you like your city to have an ecological place image? Source: own research.

Large difference between respondents from different age groups, are visible in the city attachment question. The most difficult was this question for the youngest people, almost each third respondents from this age group (29%) did indicate answer “hard to say”. The strongest city attachment is declared by the eldest people, “very strong” and “rather strong” was indicated by 46% (Figure 9). Weakest attachment is seen in the declarations of young people, „very strong” was indicated only by 14%. This may result from higher mobility and openness to the world by younger generations of Poles, who have no families yet, study in other cities and their professional plans aren’t connected with this city. It may be said that it’s a generation, which has weakest “roots” in the city.

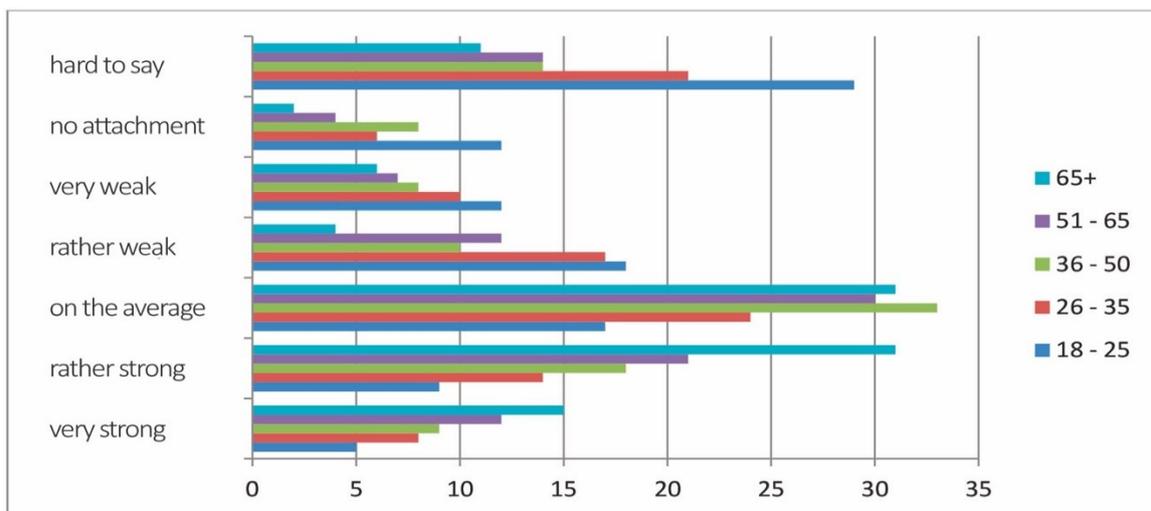


Figure 9. How would you define your attachment to the city (bonds with the city)? Source: own research.

Access to the green or recreation areas appears to be very important for identification with a city, for all respondent age groups (Figures 10). Largest differences occur for other factors. Young respondents indicate large importance of accessibility to a city's communication or to gastronomic premises (restaurants, pubs, cafes) and amusement as well as jobs and tenement accessibility. The group of eldest people absolutely indicate factors relating to safety in the streets (68%) or air quality in the city (54%). The eldest are also the group, which most frequently among the respondents indicate the questions of multi-generation rooting in the city as a factor of identification with the city (29%). Air quality is also the most important factor for the age groups between 36-50 or 51-65, while for the youngest group this factor has a relatively low importance.

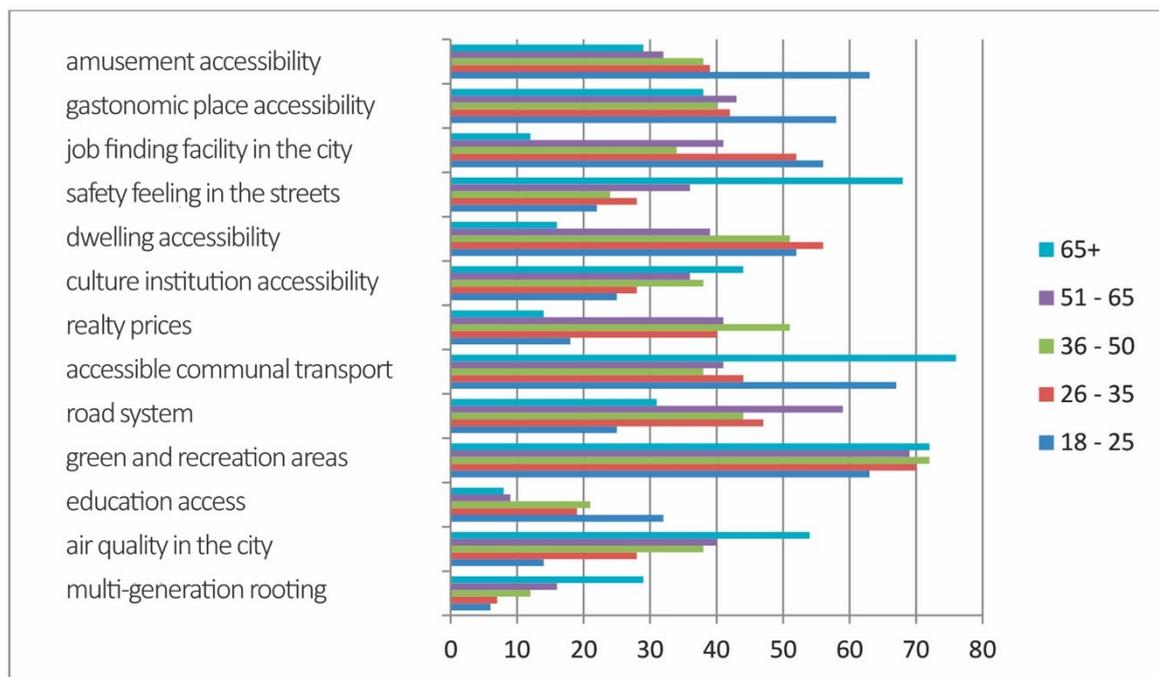


Figure 10. What factors are most important for your identification (feeling of satisfaction due to a city) with the city? (indicate 5 most important maximum). Source: own research.

The question of dependence between improvement of environment status and their attachment to the city, majority of respondents found impossible to answer. Each third from the youngest respondent group (32%) did indicate that the air quality would rather not affect their attachment to the city (Figure 11). There was also a group, for which the air quality has a weak importance for their identification with the city (Figure 10). However, people from the age group 51-65 and 36-50 most frequently, among the respondents, did declare that improvement of natural environment would positively affect increase of city attachment. Among the older people 38% did declare that „rather no” or „absolutely no”, but it should be kept in mind that it's a group, among which was the larger part of declaring the strong attachment.

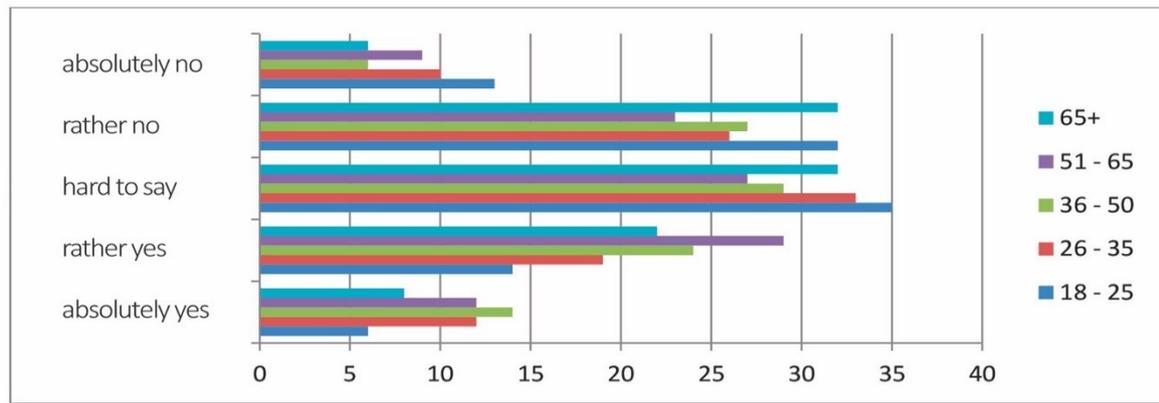


Figure 11. Would the improvement of the city's natural environment status increase your attachment to the city? Source: own research.

Conclusions

Inhabitants are important group from the city's marketing actions point of view, because strong inhabitant local identity positively affects city's development, creates its symbolic capital and transforms into its image among external surrounding. Different age groups will look differently the city's ecology problem. It should be clearly known that it affects a series of factors, independent from the city. Majority of respondents declare that the pro-ecological city image is important for them. They, on a small scale, look by themselves for information about ecological actions taken in the city. Simultaneously, disregarding the age, they can indicate areas, in which ecological actions in the city are most visible. Differences between generations are visible in case of city attachment declaration or in case the question if the improvement of natural environment would positively affect their city attachment? Young people are the group littlest attached to the city and for them improvement of environment status has a small influence for their attachment. This may result from a fact that they are the most mobile people, foreign language speaking, aware that during their lives, they shall change their jobs, travel and they are also the most open for a world, other cultures and living places and they do not identify so strongly. Lack of deepened reflection over ecology problems in the city among young people isn't a surprising thing, because in this age other priorities prevail, connected with finding a job, dwelling or accessibility of amusement or gastronomic services. Taking into account the ecological problems in the city, authority's marketing actions are important questions due to a several reasons. Improvement of a natural environment status requires long-term actions. Ecology affects inhabitant life quality and their satisfaction from the city (especially in older age groups), which is important in the context of depopulation and ageing of a city population. The city identity and satisfaction due to living in it is affected by access to greens or recreation areas, allowing realization of everyday people activities, which is indicated by all the age groups. Inhabitants would like their city to be perceived as ecological one. Low activity in the

range of individual seeking information relating to pro-ecological authority actions, show how important for inhabitants is information and communication policy.

References

1. Bańka, A. (2014). Przywiązanie do miejsca i jego znaczenie w kontekście współczesnych zagrożeń cywilizacyjnych. In: K. Popiołek, A. Bańka (eds.), *Spoleczna psychologia stosowana. Człowiek w obliczu zagrożeń współczesnej cywilizacji* (pp. 158-167), Sztowarzyszenie Psychologia i Architektura – Uniwersytet SWPS, DOI: 10.14691/spia.sps.2.158.
2. Bartkowski, J. (2007). Kapitał społeczny i jego oddziaływanie na rozwój w ujęciu socjologicznym. In: M. Herbst (ed.), *Kapitał ludzki i kapitał społeczny a rozwój regionalny*. (pp. 54-92). Warszawa: Wydawnictwo Naukowe Scholar.
3. Bourdieu, P., Wacquant, L.J.D. (2001). *Zaproszenie do socjologii refleksyjnej*. Warszawa: Oficyna Naukowa.
4. Brzeziński, K. (2016). Więź mieszkańców z miastem postprzemysłowym na przykładzie Poniewieża, Łodzi i Iwanowa. *Studia Miejskie, t. 21*, pp. 29-51.
5. Dąbrowska-Budziło, K. (2002). Treść krajobrazu kulturowego w jego kształtowaniu i ochronie. *Zeszyty Naukowe Politechniki Krakowskiej, Architektura, nr 46*. Kraków.
6. Giuliani, M.V. (2003). Theory of attachment and place attachment. In: M. Bonnes, T. Lee, M. Bonaiuto (eds.), *Psychological theories for environmental issues* (pp. 137-170). Ashgate: Hants.
7. Glińska, E. (2011). Identyfikacja wyróżników tożsamości miast podlaskich – koncepcja badań. *Zeszyty Naukowe Uniwersytetu Szczecińskiego, 663, Ekonomiczne Problemy Usług, 75*, pp. 35-47.
8. Goovaerts, P., Van Biesbroeck, H., Van Tilt, T. (2014). Measuring the effect and efficiency of city marketing. *Procedia Economics and Finance, 12*, pp. 191-198.
9. Gorzelak, G. (2004). Polska polityka regionalna wobec zróżnicowań polskiej przestrzeni. *Studia Regionalne i Lokalne, nr 4(18)*.
10. Hummon, D.M. (1992). Community attachment. Local sentiment and sense of place. In: I. Altman, S.M. Low (eds.), *Place attachment* (pp. 253-277). New York-London: Plenum Press.
11. Januchta-Szostak, A. (2011). *Woda w miejskiej przestrzeni publicznej modelowe formy zagospodarowania wód opadowych i powierzchniowych*. Poznań: Wydawnictwo Politechniki Poznańskiej.
12. Kizielewicz, J. (2013). Kształtowanie marki i wizerunku miasta Gdynia, jako morskiej destynacji turystycznej. *Polityki Europejskie, Finanse i Marketing, nr 9(58)*, pp. 242-254.

13. Koszko, M. (2018) Redefiniowanie i kształtowanie wizerunku współczesnego miasta – zmiany i wyzwania kulturowe – wstępne uwagi. *Scripta Neophilologica Posnaniensia. Tom XVIII*, pp. 43-53.
14. Kotarski, H. (2013). *Kapitał ludzki i kapitał społeczny a rozwój województwa podkarpackiego*. Rzeszów: Wydawnictwo Uniwersytetu Rzeszowskiego.
15. Lacinák, M., Ristvej, J. (2017). Smart city, Safety and Security. *Procedia Engineering*, 192. Elsevier Ltd., pp. 522-527. Available online www.sciencedirect.com, 01.09.2021.
16. Landry, Ch. (2013). *Kreatywne miasto. Zestaw narzędzi dla miejskich innowatorów*. Warszawa: Narodowe Centrum Kultury.
17. Lewicka, M. (2012). *Psychologia miejsca*. Warszawa: Wydawnictwo Naukowe Scholar.
18. Lis, A., Szerenos, A. (2009). Koncepcja kapitałów Pierre'a Bourdieu w badaniach klastrow przemysłowych. *Studia Regionalne i Lokalne, No. 2(36)*, pp. 28-46.
19. Loegler, R. (2011). Przestrzeń publiczna – życie poza budynkiem. Architektura i urbanistyka. *Zeszyty Naukowe Politechniki Poznańskiej, z. 23*. Poznań: Wydawnictwo PP, pp. 15-19.
20. *Lokalny program rewitalizacji Miasta Sosnowca na lata 2010-2020*. http://www.sosnowiec.pl/_upload/file/LPR%20miasta%20Sosnowca%20na%20lata%202010-2020_v06_2013.pdf, 18.11.2021.
21. Lynch, K. (2011) *Obraz miasta*. Kraków: Wydawnictwo Archiwolta Michał Stępień.
22. Meffert, H. (1989). Städtemarketing – Pflicht oder Kür? *Planung und Analyse, nr 8*, p. 277.
23. Menclew, J. (2020) *Betonoza. Jak się niszczy polskie miasta*. Warszawa: Wydawnictwo Krytyki Politycznej.
24. Mierzejewska, L. (2001). *Tereny zielone w strukturze przestrzennej Poznania*. Poznań: Wydawnictwo Poznańskiego Towarzystwa Przyjaciół Nauk.
25. Niemczyk, A. (2018). Wizerunek miasta w ocenie mieszkańców i jego determinanty. *Marketing i Zarządzanie, nr 2(52)*, pp. 115-127, DOI: 10.18276/miz.2018.52-11, 11.12.2021.
26. *Raport o stanie Gminy Sosnowiec 2020*. Available online http://www.sosnowiec.pl/_upload/Raport%20o%20Stanie%20Gminy%202020%20. 31.05.2021).pdf, 22.10.2021.
27. Rurański, M., Niemczyk, J. (2013). Współczesne instrumenty kształtowania wizerunku miasta na przykładzie Wrocławia. *Studia Miejskie, tom 11*, pp. 67-78.
28. Stokols, D., Shumaker, S.A. (1981). People and places: a transactional view of settings. In: J. Harvey (ed.), *Cognition, social behaviour and the environment* (pp. 41-488). Hillsdale, NJ: Erlbaum.
29. Szromnik, A. (2016). *Marketing terytorialny, Miasto i region na rynku*. Kraków: Oficyna Wolters Kluwer business.
30. Trąbka, A. (2018). Zmiany przywiązania do miejsca zamieszkania pod wpływem mobilności i ich znaczenie dla dobrostanu jednostki. In: A. Anczyk A., J. Grzymała-

- Moszczyńska, A. Krzysztof-Świdorska (eds.), *Psychologia kultury – kultura psychologii* (pp. 239-250). Katowice: Wydawnictwo Sacrum.
31. *Urząd Statystyczny w Katowicach, Statystyczne vademecum samorządowca 2020*. Available online <https://katowice.stat.gov.pl/>, 12.12.2021.
 32. Wang, Hui-Ju. (2019). Green city branding: perceptions of multiple stakeholders. *Journal of Product & Brand Management*, 28(1), February.
 33. Wiatrak, A. (2017). Marketing terytorialny w komunikowaniu i partnerstwie regionalnym i lokalnym. *Handel Wewnętrzny*, nr 4(369), tom I, pp. 240-252.
 34. Zachariasz, A. (2006). *Zieleń jako współczesny czynnik miastotwórczy ze szczególnym uwzględnieniem roli parków publicznych*. Kraków: Politechnika Krakowska im. Tadeusza Kościuszki.
 35. Zańko, P., Te polskie miasta wyludniają się najszybciej. Czy Polska straci 10 milionów mieszkańców? *Polska Times*. Available online <https://polskatimes.pl/te-polskie-miasta-wyludniają-sie-najszybciej-czy-polska-straci-10-milionow-mieszkanow-ar/c9-15079231>, 16.11.2021.
 36. Zaremba-Warnke, S. (2009). Pojęcie marketingu ekologicznego. In: S. Zaremba-Warnke (ed.), *Marketing ekologiczn*. Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu.