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# City Corporation Activities for Creating Sustainable Population Development in the Opinion of University Students in Gdansk (Poland)

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**Abstract:** Nowadays, urban areas very often attract the poor and the unemployed, leading to the creation of neighbourhoods of poverty (slums) and other economic and social problems. All over the world, cities include sustainable goals in their development strategies, but the question is, do these city development strategies also foresee activities devoted to human capital growth? The purpose of the study was an analysis of city corporation activities and of students' perception of a city corporation's activities that aim to encourage educated young people to study and settle in their city, using the example of Gdansk, Poland. The study was conducted in 2021–2022, based on desk research and an Internet survey. The research group comprised students at the University of Gdansk (Poland). The main conclusions from the study are: (1) cities' sustainable policies are slightly integrated with actions meant to encourage highly educated people to settle within; (2) Gdansk students' decisions to settle are not correlated with city corporation activities, and (3) from Gdansk students' perspective, preferential accommodation costs are the most expected city corporation actions.



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**Keywords:** sustainable population; city development strategies; human capital; sustainable development; Gdansk

## 1. Introduction

The concept of sustainable development (SD) is subject to wide interpretation by researchers from almost every scientific discipline, each of them introducing their own definition or understanding of the SD concept [1]. The widely known and basic definition of SD was provided by the Brundtland Commission in 1987 [2] as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. It has since, then, been accepted that SD involves a direct interdependency between the environment, economy, and society, on a global level [3,4]. Within each of those aspects, there are several problems explored by scientific research and policy measures. One of the issues most often studied in recent literature relates to the role of people and society [5]. Among the seventeen SD Goals of the UN's Agenda 2030, at least seven are directly linked to social aspects: i.e., Goal 1: No Poverty, Goal 2: Zero Hunger, or Goal 4: Quality Education [6]. A problem directly connected to discussions about SD is population dynamics. Tal and Kerret underscore the need for stable population growth. In their opinion, “Ecology teaches that stability, or having sufficient resilience to maintain a population equilibrium, constitutes a critical component of any sustainability strategy. Societies where birth-rates have fallen far below replacement levels can face economic and social consequences which may ultimately undermine government solvency and the social contract” [7]. Although in some countries, population growth is decreasing, overall trends indicate that population growth will continue to rise globally for some time [8,9].

According to Schultz and Letiche [10], population quality is a guarantee of economic development. The role that population plays in realizing sustainable development relies not only on its volume, but on its quality, as well. The quality of a population is based

on its education, experience, skills, and health [10]. High population quality increases the chances for good performance in terms of the social aspects of sustainable development. Thus, it is necessary for countries that aim for development to guarantee education and work, especially for young adults, to prevent migration. As was stated in one of the United Nations Population Fund reports, “research in the last decade suggests that education increases people’s life opportunities in general, greatly contributes to technological and social innovation, and creates the mental flexibility required for a rapid transition to a green economy. This applies to both low- and high-income countries. Hence, the enhancement of human capital from early childhood to old age through formal and informal education and life-long learning is now known to be a decisive policy priority” [9].

It is necessary to mention that there are two approaches to the relationship between population and economic growth. One of the most widely known and discussed theories is Thomas Malthus’ idea that a geometric population growth will lead to a total depletion of the world’s natural resources, and consequently, to the self-destruction of mankind. The problem of sustainable city development needs to be studied locally and with a short-term perspective (for demographic changes, a short-term perspective means even a few decades). Contrary to Malthus’ concept, “optimistic” theories do not perceive an increase in population as an independent obstacle for economic growth. In those theories, emphasis is placed on the positive aspects of the birth rate. One such positive aspect is the scale effect [11], which is understood as a situation where “the rate of growth of per capita output is a monotonically increasing function of the rate of growth of the population” [12]. Another positive aspect of population growth noted by researchers is the increase in human capital, explained as “knowledge, skills, and health that people accumulate throughout their lives enabling them to realize their potential as productive members of society” [12]. Additional benefits of population growth are improved knowledge capital (defined as knowledge accumulated in society leading to innovation and research development) [13,14] and a greater intellectual potential of the population (understood as adding value to a greater human capital affecting countries competitiveness) [15,16]. A positive change in the quality of population in cities can support the efforts to overcome difficulties of an economic, social, and environmental nature. The strengthening of a population’s human, social and labour potential is crucial for following a sustainable development path [17]. Nathaniel, Yalçiner, and Bekun’s findings suggest a feedback causality between human capital, urbanization, and ecological footprint. They claim that “countries must now shift attention to improving their human capital resources so as to avoid further environmental pressure and distortions. When people are educated, they will aim for cleaner energy sources and able to protect their environments better” [18]. Another recent study indicates that, from a global perspective, human capital has a substantial influence on the ecological footprint of urbanized societies. It points to the fact that “The higher the level of urbanization is, the higher is the turning point of human capital that is needed to improve environmental quality” [19].

Some of the biggest challenges of our time are ageing societies. According to Coleman and Rowthorn, this phenomenon is the cause of several negative effects on a macro scale [20]:

- The slowing down of absolute and per capita economic growth.
- The deterioration of public and external security.
- The weakening of the political position in the international arena.
- The slowing down of social labour productivity growth.

A society’s workforce is a core component of its production factors. Increased expansion of the workforce, as a consequence of working age population growth increase, has a strong influence on growth [21] and leads directly to the rise of total GDP (Gross Domestic Product). Investors’ and innovators’ moods are positively correlated with population size. A large and growing population facilitates an absorptive market, the availability of labour force, and positive scale and specialization effects, which support productivity growth. In a contrary situation, the listed benefits turn into their opposites. A declining population implies the necessity to introduce higher taxes to maintain the existing infrastructure and

fixed public expenses. Social productivity of labour depends not only on the level of social capital (which we define following Fukuyama's approach as "an instantiated informal norm that promotes co-operation between two or more individuals" [22]), but on technical and organizational progress, as well. The latter depends directly on the distribution of abilities in a society, which is relatively constant in time and space [8]. Hence, the reduction of the absolute size of a population will result in a reduction of the aggregated innovative and intellectual potential in the society, which may result in an extenuation of the dynamics of technical and organizational progress [23].

Goal 4 of the UN's Agenda 2030 for Sustainable Development places a special emphasis on the quality of society, as it speaks of ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. This idea is developed in detail in Goal 4.b by pointing out the necessity to substantially and globally expand "the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries" by 2020 [6].

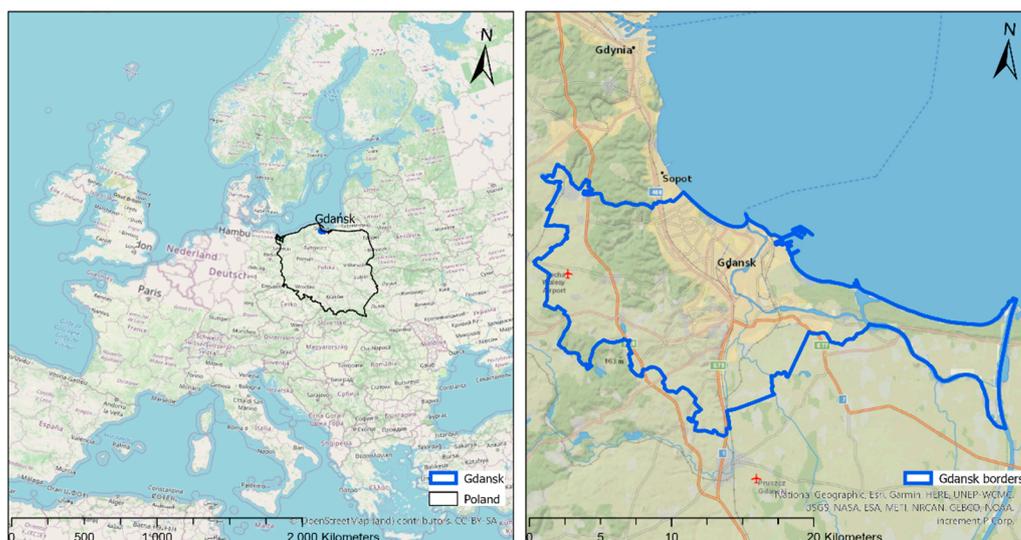
Around the world, cities are including sustainable development goals and sustainable development principles in their strategies [24]. Strategic actions for sustainable development are aimed at increasing investment attractiveness and reducing ecological footprints. It is interesting to see however if development strategies foresee activities devoted to population growth and if it is the case, what specific actions are taken.

Urban growth is indispensable for developing countries, particularly in the context of rapid economic development and growing urban populations. The idea of managing urban growth is often restricted exclusively to large metropolises, ignoring small and emerging cities from the requirement of having sustainable urban growth strategies. Following this global tendency, cities in Poland are expected to host emerging future urban populations. In this context, the dynamics of urban growth in such cities must be studied, and urban policies must be reoriented, to ensure sustainable future urbanization [25]. Ascendant cities in post-socialist regions are active in introducing Smart City strategies [26]. The question is, to what degree do they indeed undertake real actions? Another question that arises concerns the perception of these actions by those to whom they are aimed—namely, the future specialized workforce and the elite, educated young. Therefore, the aim of the study was an analysis of city corporation activities and of students' perceptions of a city corporation's activities that aim to encourage educated young people to study and settle in their city. Gdansk, a growing city in northern Poland, was chosen as a case for this study.

## 2. Materials and Methods

The research was based on the case study method, which, according to Yin, is an empirical study concentrated on understanding a contemporary phenomenon (case) in its real context [27]. The case study method is appropriate when the researchers are looking to find in-depth information related to the cause-and-effect of a situation by asking questions on "how" and "why" [27]. The case selected for the research was presumed to have a city policy related to sustainable development and a lack of city activities aimed at increasing the highly educated population. This approach is in line with investigations showing that legal frameworks of sustainable development may be legislated, but are often rarely implemented [28]. The next assumption was related to the situation where cities offer to support student activities (understood as future residents), but where these supports either stay unnoticed or are perceived as insufficient to promote settlement. It was assumed that Gdansk is perceived by young residents of Poland as attractive for settlement.

Gdansk is a city in Central Europe, in northern Poland, on the Gdansk Bay of the Baltic Sea at the mouth of the Vistula River (Figure 1). The city population is 470,621 (as of 31 December 2021) with 270,425 of working age citizens [29].



**Figure 1.** The borders of Gdansk and its geographical location against the background of Europe and Poland.

Gdansk is characterized by moderate urbanization and is one of the few cities in Poland that has not recorded a drop in population. The population in Gdansk has remained at a similar level for many years, with a slight upward trend. The city area still has a lot of undeveloped land, which creates potential for proper urbanization. Cities where space is already developed have more difficulties in introducing changes to the existing structure. Cities that are able to allocate new areas for development can control their expansion to ensure the possibility of proper development in the future.

Gdansk gained the title of “the most liveable city in Poland” [30]. In the 2022 NUMBEO ranking, according to the Quality of Life Index by City, Gdansk is ranked 9th in Eastern Europe [31]. The city aspires to be known as a “Smart City”, which, in this case, means that efficient management of Gdansk’s public space and constant improvement of the living comfort of its inhabitants must include the use of comprehensive solutions based on modern technologies. The idea of the so-called Smart City is an opportunity for Gdansk and its entire metropolis to improve its functioning through effective, economical, and ecological management. Such changes will translate into increased public service efficiency, i.e., mobility, energy, and dialogue with citizens [32]. The idea of the Smart City fits with the concept of sustainable development, and is part of the European Union’s sustainable development policy.

Regardless of how much cities understand smart development as infrastructure development and digitization of urban functions, sustainable development requires social improvement through the advancement of a population characterized by high human capital. According to research done in the UK, “for university cities retaining the students that have studied there after graduation means adding talented young minds into the local workforce” [33]. Research conducted in China also proves that highly educated human capital is “a key driver for innovation, thereby promoting regional economic development in the knowledge era” [34].

Research on factors influencing the settlement decisions of people with higher education showed that, besides jobs, the urban amenities in the city of destination exert impacts on the inflow volume of graduates [34]. A long-term study in Lodz, Poland, confirms that noneconomic factors of migration, such as relational ties and self-attachment to the city, but also marketing activities, strongly affect students’ decisions regarding staying in or leaving the city [35].

Therefore, a few questions arise, whether apart from the implementation of high-budget infrastructure projects, does Gdansk take the importance of human capital development along with population growth into consideration? Does the city corporation perform

any real actions related to this problem? If so, do residents and non-residents see these actions?

The first part of the study consisted of an analysis of the Gdansk city corporation activities (included in strategies and resolutions) aimed at encouraging young, educated people to study and settle in city. The second part of the research constituted a questionnaire that aimed to discover if students were aware of those activities and how they were perceived.

The main assumptions made in the study were as follows: (1) sustainable population development requires an increase in population size as well as human capital development; (2) one of the tools for achieving such development is to encourage educated young people to settle in the city. The following research questions were derived from the aforementioned assumptions: (Q1) Have the goals related to attracting students and encouraging them to settle in the city been stated in the city strategy? (Q2) Are the city authorities carrying out any real actions to attract young people to study and to encourage them to settle in the city? (Q3) What encouraged the students in choosing the place of study? (Q4) Do students want to settle in the city after graduation? (Q5) What are students' needs related to settling in the city after graduation? (Q6) Are students observing or aware of any actions of the city authorities to encourage them to study in the city? (Q7) Do students feel as/ Are students recipients of any actions on the part of the city to encourage/enable them to settle in the city after graduation?

In order to answer the research questions two types of studies were carried out:

1. City's strategy and actions survey, in order to answer questions Q1 and Q2.
2. Students' opinion survey, in order to answer questions Q3–Q7.

The City's strategy and actions survey consisted of reviewing the provisions included in the strategies regarding social capital as well as programs and activities offered by the city aimed at young and educated people. This study was conducted using desk research based on city strategic documents and information contained on websites of city corporations and local media. The study assumed that the activities and programs offered by city corporations may be designated to four different target groups, and thus, may differ depending on the customers. The target groups and potential goals of municipal authorities' activities are presented in Table 1.

**Table 1.** Target groups and possible goals of municipal authorities' activities and programs.

Before College		After College
Residential	encouraging to study in the city of residence	<ul style="list-style-type: none"> <li>- encouraging to stay in the city after obtaining higher education (also in the case when studies were carried out in other cities)</li> <li>- preventing the outflow of educated people to more attractive urban centres</li> </ul>
Non-residential	encouraging to move and study in the city	<ul style="list-style-type: none"> <li>- encouraging educated people to move to the examined cities</li> <li>- encouraging non-residents who studied in Gdansk to stay in the city and settle permanently</li> </ul>

Students' opinion survey was based on an Internet questionnaire conducted in April 2022. The research group consisted of students of the University of Gdansk (Poland). A link to the survey was sent to all university students by central administration. Each student received a link to the survey through their online student account, as well as an e-mail notification. Response to the invitation to the study was voluntary. The survey was completed by 298 students. Questions included in the survey referred to the following issues: the factors that prompted them to study in Gdansk, the activities of the Gdansk City Corporation that encouraged them to study in the city, their willingness to settle in Gdansk after graduation, their most important reasons for settling in Gdansk, and their opinion

about which actions should be taken by city corporations to encourage educated young people to settle in the city.

### 3. Results

#### 3.1. Analysis of Gdansk Strategies and Actions

The answers to research questions Q1 and Q2 were obtained from desk research of strategic documents and information gained from the city website. Table 2 presents collective provisions that constitute a declaration of the goals and activities of city authorities aimed at encouraging young people to study in the city, both addressed to young inhabitants (residents) and to potential students from other areas (non-residents). Additionally, Table 2 presents activities aimed at young educated people from outside the city, meant to encourage them to settle there, with the goal of increasing the number of residents with high human capital potential.

**Table 2.** City strategies and activities dedicated to encouraging young people to study and settle down in the city after graduation.

Assumptions/Activities	Details
City strategy and other similar documents	<ul style="list-style-type: none"> <li>Gdansk 2030 Plus Development Strategy</li> <li>Gdansk Operational Programmes 2023</li> </ul>
Strategic objectives to increase the number of inhabitants	<p>Strategic objectives Education and social capital are the basis for shaping further development of Gdansk, through:</p> <ul style="list-style-type: none"> <li>improving accessibility of educational and care services</li> <li>improving the quality of school education</li> <li>enhancing social cohesion and supporting socially excluded people and people at risk of social exclusion</li> <li>increasing inhabitants' involvement in the city's affairs</li> </ul>
Operational objectives for preventing the displacement of young people from the city	<p>Operational objectives in 9 topics: 1) education; 2) public health and sports; 3) social integration and active citizenship; 4) culture and leisure; 5) innovation and entrepreneurship; 6) investment attractiveness; 7) infrastructure; 8) mobility and transport; 9) public space</p>
Activities stated in the city strategy/documents, aimed at encouraging students to stay, and study in the city—addressed to residents	Indirect activities related to creating well being in the city
Actions stated in the city strategy/documents, aimed at encouraging people to stay in the city—addressed to residents	Indirect activities related to creating well being in the city
Activities stated in the city strategy/documents, aimed at encouraging to settle in the city—addressed to the non-residential population	Indirect activities related to creating well being in the city
Actual direct city actions aimed at encouraging to study in the city—addressed to residents	Mayor of Gdansk scholarship for students
Actual direct city actions aimed at encouraging people to stay in the city—addressed to residents	<ul style="list-style-type: none"> <li>“Wakacyjny Staż” (Summer Internship Programme)</li> <li>“Wypracuj przyszłość” (“Work out your future” Programme)</li> </ul>
Actual direct city actions (programmes), aimed at encouraging to study in the city—addressed to non-residential population	“Gdańsk. Tu się żyje” („Gdansk. Here you live” campaign)
Actual direct city actions aimed at encouraging people to settle in the city—addressed to non-residential population	<ul style="list-style-type: none"> <li>Program Gdańskie Mieszkania dla Powracających z Zagranicy (Gdansk Apartments for Returnees Abroad Programme)</li> <li>“Gdańsk. Tu się żyje” („Gdansk. Here you live” campaign)</li> </ul>

An analysis of the information presented in Table 3 provides the following answers to the research questions: Gdansk city refers to the population growth forecast in its development strategy by concentrating on encouraging young people to settle in the city.

**Table 3.** The main characteristics of responders of University of Gdansk (UG).

	UG Students in Total	Probe
Female	65.34%	68.79%
Male	34.66%	31.21%
Total no of students	22,483 (100%)	298 (1.33%)

However, the analysis of urban policy in the field of sustainable development, and the analysis of activities undertaken by city through programs offered to young people showed that there is no direct link between the adopted goals and activities. The offered programs do not fit into a coherent system of activities undertaken to attract educated young people to the city and do not support the decision to settle down. The city wants to influence social development indirectly by creating the best possible living conditions for its inhabitants. These actions are included in a variety of policy areas stated in a strategic document entitled “The 2030 Plus vision of Gdansk”. According to this document, “Gdansk is a city gathering and attracting what is most valuable—people who are proud of their heritage, community spirited, openminded, creative, developing and jointly shaping their future. The implementation of this vision will result in a lasting improvement of the quality of life and increase in the number of inhabitants” [36]. Operational Programmes for the city of Gdansk are focused on combining multiple areas of socio-economic development, which include “equal opportunities; revitalization; safety; environment; smart city” [37]. The aim of city authorities is to create resident-friendly conditions, to encourage them to stay in the city, and to attract young people from other cities and abroad. The goal is to aim programs and actions for inhabitants from outside the city mainly to young people, because they are considered to be the most mobile in Poland.

Despite the above-mentioned undertakings, there are no direct provisions in the development strategy of Gdansk meant to increase the number of young people involved in education, including in higher degree studies. Promotional activities aimed at encouraging young people, in general, to settle in the city are more abundant. Gdansk is running a nationwide media campaign aimed at encouraging young people (students and young people already working or looking for their first job) to settle in Gdansk—“Gdańsk. Tu się żyje” (Gdansk. Here you live). As part of the campaign, the city prepared promotional movies and a website [38] showing numerical data that aims to explain why it is worth settling down in Gdansk. The website shows i.e., that the unemployment rate in Gdansk is 3.3% compared to 6.8% at the national level, or that the average monthly salary is higher than the national average. Another piece of the campaign has an educational element, which aims to publicly discuss the features of a city ideal for living and to increase awareness of the so-called “Wellbeing”—maintaining a balance between work and private life, caring for the best quality of one’s own life, the role of activity in human life, etc. [38].

The city undertakes measures to make it easier for students to prepare for the best possible entry into the labour market, to establish contacts with Gdansk companies in order to increase chances of finding a job in Gdansk. To this end, the city coordinates two programs:

- Wakacyjny Staż (Summer Internship Program) is a project that has been implemented in Gdansk since 2003 and its aim is to enable students and graduates of higher education to gain professional practice that will help them find their first job in the future. The program also makes it easier for companies, non-governmental organizations, and institutions to find and hire interns during the holiday season. People who are students or graduates of all types and modes of study, both in Poland and abroad, can apply for internships. The internship sponsor may be a company, non-governmental organization, or other institution that accepts interns and agrees to pay them a remuneration of the minimum amount specified in the internship regulations.
- Wypracuj Przyszłość (“Work out your future” program) is a year-round internship project conducted by the City Hall in Gdansk. The aim is to help final-year students and graduates of vocational schools, as well as students and graduates of universities, to gain professional experience, as well as to facilitate their entry into the labour market. The sponsors of the internships may be companies, non-governmental organizations, or other institutions that agree to accept interns and pay them a monthly remuneration. The duration of the internship and the form of employment are individually determined by the sponsor in consultation with the intern. The internship should last at least one month.

An additional activity of Gdansk, which is a result of the specific demographic and social situation of Poland, is a program encouraging Polish citizens who live abroad to return to Gdansk. Gdansk Apartments for Returnees Abroad Program (Gdańskie Mieszkania dla Powracających z zagranicy) is the first program in Gdansk, and one of the few in Poland, to support people currently staying abroad who are interested in returning to the country. The aim of the program is to encourage families to live and work in Gdansk.

### 3.2. Analysis of Students' Perceptions

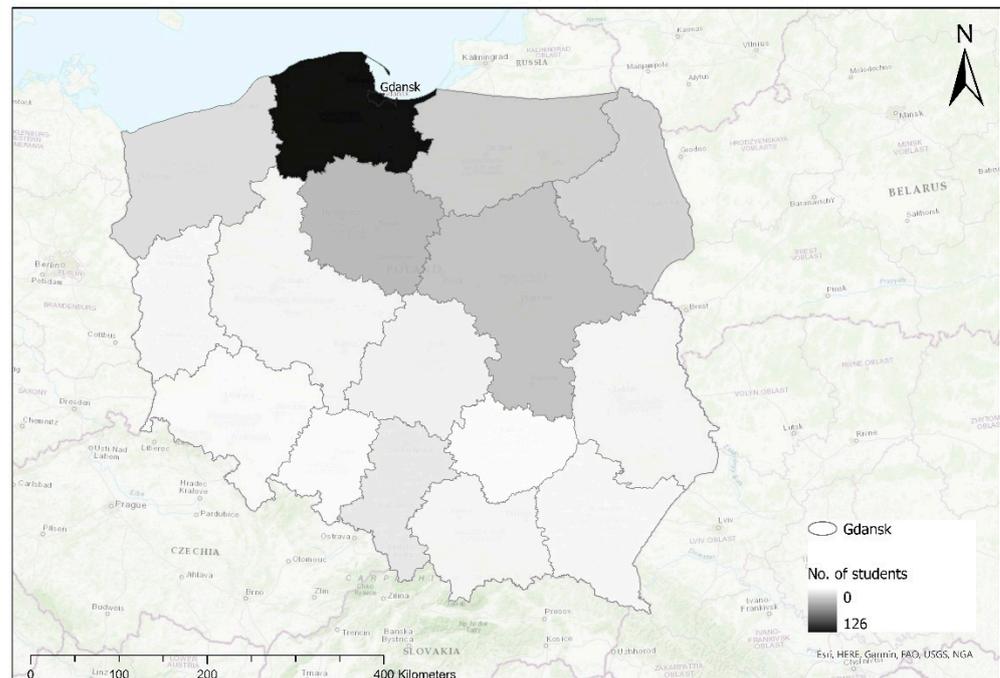
In total, 298 students from all faculties participated in the study, which constituted 1.33% of the Gdansk University students' population. The study can be considered representative, assuming a maximum error of 6%, with a confidence level of 95%. Table 3 presents the general characteristics of the survey sample.

Among the group of students who answered the questionnaire, the vast majority (89%) were non-residents of Gdansk. Table 4 summarizes the key answers given by respondents in relation to the research questions

**Table 4.** Main answer of respondents.

Research Question	Key Responses
(Q3) What encouraged the students in choosing the place of study?	The 3 most important issues for respondents: 1. UG's offer 2. Proximity to the place of residence 3. "It is easier to find a job in Gdansk after studying in Gdansk"
(Q4) Do students want to settle in the city after graduation?	Yes—42% I don't know yet—38% No—20%
(Q5) What are students' needs related to settling in the city after graduation?	The 2 most important issues: 1. Quality of life (i.e., access to services, infrastructure) 2. Job market offer (ease of finding a job, already held employment, etc.)
(Q6) Are students observing or aware of any actions of the city authorities to encourage them to study in the city	15% of respondents noticed the city's activities aimed at encouraging them to study in this city
(Q7) Do students feel as/ Are students recipients of any actions on the part of the city to encourage/enable them to settle in the city after graduation?	17% of respondents see the city's activities aimed at encouraging them to settle in Gdansk after graduation

Among the factors that prompted the respondents to study in Gdansk, the education offer of the University of Gdansk was ranked first. Additionally, according to respondents, studying at the University makes it easier to find a job in the city. An important factor in favor of studying at the University of Gdansk is its proximity to their place of residence, which is also reflected in the distribution of the origin of the respondents studying at the University of Gdansk (Figure 2). This factor can be considered as important for the respondents, since 42% of them are determined to settle down in Gdansk after graduation.

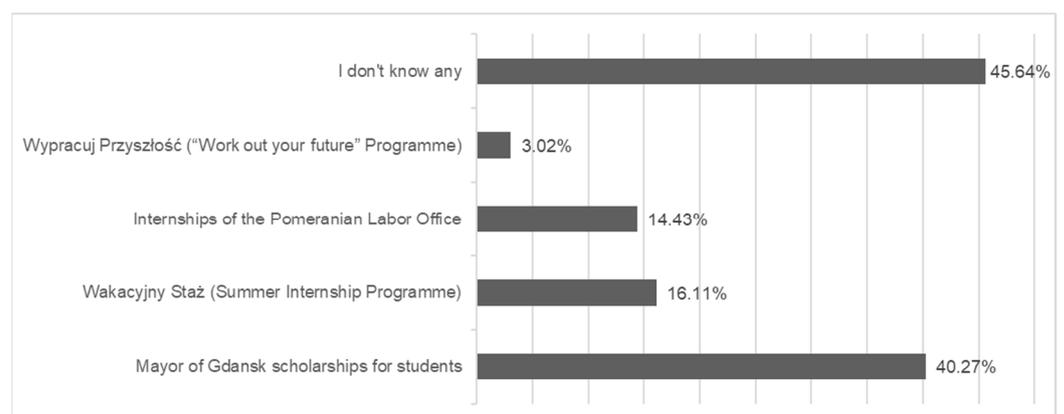


**Figure 2.** Regions of origin of the University of Gdansk students participating in the study.

The respondents were asked to mark up to two factors that are important to them when making decisions about settling in a city. The majority of respondents indicated quality of life in a given place and the job market offer or already-held employment at the time of graduation as the most important factors. The third factor selected, although much less frequently, was the issue of closeness to family or friends. In the opinion of 60% of respondents, the city of Gdansk creates conditions for young people to settle down after their studies. Only 5% of the respondents indicated programs supporting students and graduates as an important factor in the decision to settle in a given place.

15% of respondents noticed the activities of the city of Gdansk aimed at encouraging them to study in the city, and 17% of respondents noticed the city's activities encouraging them to settle in Gdansk after graduation.

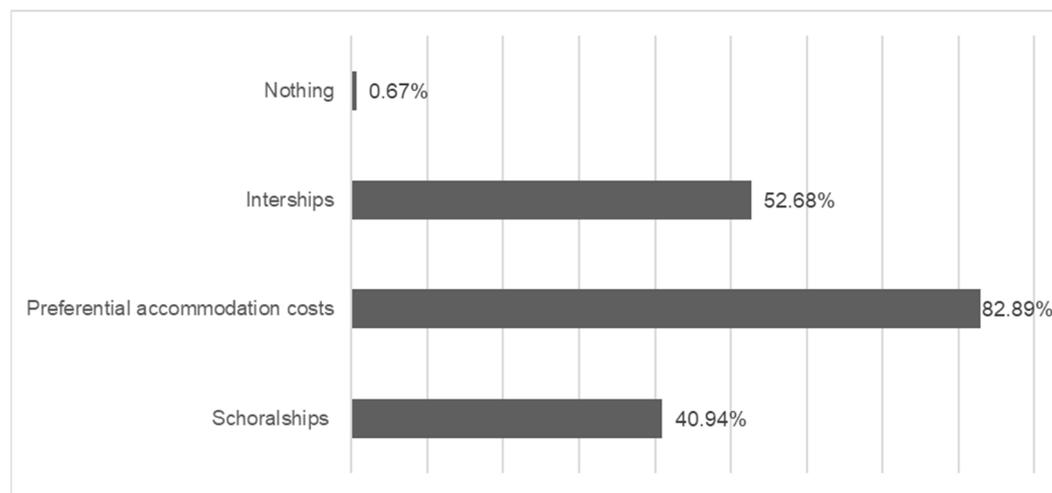
Figure 3 presents the knowledge of supporting programs offered in Gdansk



**Figure 3.** Knowledge of activities (supporting programs) undertaken in Gdansk (in % of respondents).

Almost half of the respondents do not know any incentive programs carried out by the city. The most recognizable are students' scholarships offered by the President of the City of Gdansk. However, to the question related to the actions that the city should undertake to

encourage students to settle in the city after graduation, over 80% of respondents indicated preferential accommodation costs as the most needed (Figure 4). Students pointed to internships and scholarships, as well.



**Figure 4.** Actions that should be undertaken by the city to encourage students to settle in the city after graduation (in % of respondents).

Other answers to this question given by the respondents in an open form were as follows (direct citations from the questionnaires): better infrastructure (for example city bikes, better roads); better public transport; less cars more greenery; better air quality; Gdansk is a very expensive city; the cost of living in Gdansk is the second highest after the capital, if we are talking about Poland, it does not encourage you to stay here after graduation. The owners of the apartments also have a very toxic approach to renting. The cost of living is too high, and the actions taken by the city (i.e., the elimination of a single ticket in public transport) also do not encourage people to stay here; scholarships for students should not be limited only to those who have been registered in Gdansk for several years.

#### 4. Discussion and Conclusions

As previously indicated, the city of Gdansk includes population growth in its sustainable development strategy. It implements various programs dedicated to students of higher education institutions located in the city. However, a study of the perception of these activities by students of the University of Gdansk, showed that the city's activities are poorly recognized by candidates and later students. The University of Gdansk was chosen by students mainly due to the availability of study programs and the quality of education, which create more possibilities to find a job after graduation. Proximity to their place of residence is an additional factor.

This information suggests that most young people do not expect any supporting measures from the city, which may be due to the fact that they do not know much about them. On one hand, this situation may be the result of a common view that no public support is to be expected, thus, students do not seek information on such programs (however, this opinion would require confirmation in an additional, subsequent study). On the other hand, the discussed study clearly shows that the actions of Gdansk city authorities are not well known to students, which suggests that more communication and promotion is needed in order to reach the audience of current and prospective students.

When discussing the results obtained in the study, it is prudent to refer to the studies which show that student attitudes are related to a city's dominant functions. Globally, it is possible to distinguish cities that have a typically university character, at least locally (so-called college towns or university towns). This means that their dominant exogenous

function is to offer higher education, but they have no settlement potential. Such cities are perceived by those who come to study only as a stopover in building a professional career [39]. In Gdansk, higher education is not the dominant exogenous function of the city. Gdansk attracts potential residents mostly due to a wide range of employment offerings and a higher quality of life. Taking up studies in Gdansk is, therefore, a first step towards settling in the city. This statement suggests that Gdansk should concentrate its activities on keeping their existing graduates, as they already have ties with the city. A study performed by Insch and Sun [40] among students of Otago University (Dunedin, Australia) shows that accommodation is among the most important perceived attribute of a city during the studies period. Another study indicates that such factors as place attractiveness, family support, and social norms can determine students' decisions regarding their choice of work location [41]. Research by Plopeanu et al. shows that "motivations and attitudes towards a meritocratic environment for professional advancement, and individual freedom are positive key factors for students' migration intentions after graduation" [42].

Conclusions derived from the abovementioned studies are in line with the findings presented in this research. In the opinion of 60% of students, Gdansk creates conditions conducive to young people settle there after graduation. The quality of life in the city is the most important factor, but the decision still requires the possibility of getting a job that will pay for living expenses. However, research by Imeraj et al. shows that economic factors such as job availability are very short-term factors, mainly for the first year after graduation. In the later period, non-economic factors are much more important for highly qualified people's decision-making regarding remaining or coming to settle in city [43].

Gdansk is largely perceived by its students as a city that provides conditions for settlement, but the biggest barriers are its disproportionately high costs of accommodation and living. It seems that, at this stage, the actions of city authorities should focus on creating preferential conditions for accommodation, or at least on supporting students during the first period after graduation.

Currently, in order to develop human capital and the influx of educated young people, city authorities should focus primarily on activities aimed at creating jobs, primarily qualified ones. Keeping people who received their educations in the city is an added value to the broadly understood economic effort spent on their education. Achieving sustainable development in terms of the quality of the population requires city authorities to adopt a broad view of the problems faced by students and educated young people.

Conclusions of the research underscore the following statements:

- 42% of students would like to settle in Gdansk after graduation.
- 60% of University of Gdansk students believe that the city in which they study creates conditions for settlement after graduation.
- The city offers some activities for students and young people to support their willingness to settle. The offer of the city of Gdansk partially meets the expectations of young people. The city organizes projects that allow students and graduates to gain work experience and show themselves to potential employers. However, these are not broad activities and most students do not notice them.
- The issue that is the most difficult for students and graduates, and is not reflected in the activities of municipal authorities, is the high cost of housing.
- For students, city activities are irrelevant for making settlement decisions. However, based on these results, it cannot be concluded that cities should avoid organizing such programs. As a result of the analysis, it is shown that students expect support in reducing accommodation costs and obtaining internships or grants.

The study certainly has some limitations, especially related to the homogeneity of the sample (although Gdansk University is the largest, there are other higher education institutions in Gdansk that were not covered by the study). More aspects of sustainable city development could be taken into consideration in future studies, i.e., the role of quality of life and health.

Although Gdansk is not currently facing problems related to population volume, authorities should concentrate on the quality of residents, understood as their education level, social, and human capital. More emphasis should be put on keeping educated people in the city as a support for reaching sustainable development goals and becoming a Smart City. The importance of high-quality population is stated in the strategic documents of Gdansk, but little is done to effectively support the young people that would like to settle in the city.

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