



RESEARCH ARTICLE

STRATEGIES FOR THE CREATION OF A SUSTAINABLE ATHENS ASSESSMENT METHOD AND BRIEF STATISTICAL ANALYSIS

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ABSTRACT

The purpose of this paper is to showcase the use of strategies in the creation of sustainable cities. Our University studies have informed us already that strategies offer the potential to showcase the competitive advantages of the city in which one lives, for instance. This can trigger higher tourist influxes, increased investments, better local and social growth, with the city thus gradually established as a sustainable city. The resources used for this paper indicate that Athens has many of the necessary qualifications to emerge as a sustainable city, yet our research also shows that there is still a lot left to be done for Athens to eventually achieve a good position in the global scale of sustainable cities.

INTRODUCTION

The main ingredient for the creation of a sustainable city is the utilization of its advantages through strategies until it eventually gains the status of “sustainable city”, as per the European standards as well. Global targets and the Agenda 2030 function as signposts for the achievement of the status of “sustainable city” – at a local level, of course. Said global targets are 17 objectives set for the achievement of sustainable development (General Assembly of the United Nations, New York, 2015). The primary goal is the creation of a world that provides for the needs of the future generations as well as the current one. Local governments can definitely help the movement towards that direction by actualizing promises and visions at a local level ([https://qualitynetfoundation.org/viosimes-poleis.](https://qualitynetfoundation.org/viosimes-poleis)) The crown jewel in Athens’ potential as a sustainable city is its very name, which comes from the goddess Athena. Its significant advantages include the Acropolis and the Parthenon, and its history as the center of philosophy and the birthplace of democracy. Athens is widely considered as a friendly, safe city, which protects to the best of its ability the financially disadvantaged, people in need, immigrants, addicts, and provides everyone with the opportunity of social inclusion.

METHODOLOGY

After reviewing the existing literature, we conducted a field study using questionnaires. Our sample consisted of students from various universities in Athens. The main purpose of the field study was to determine the gap between the objective principles of sustainable development and the current state of the city of Athens. Based on the students’ academic knowledge and culture, we tried to delve into the degree to which each citizen is aware of the implemented strategies for sustainable development in Athens. Analysis of the Variables In the course of our study, we met with some people who refused to fill in the questionnaires, orally expressing their disagreement with the English term “sustainable development” used therein as the translation of the equivalent Greek term. However, the majority of the people approached believed that sustainable development aims for fulfilling the present needs without preventing the fulfillment of future generations’ needs.

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Of course, sustainable development also aims to defend the harmonious coexistence of local communities, equal access and equal division of resources to all citizens, and the respect of human rights. Sustainable development concerns the support of democratic and participatory processes, freedom of speech, and the election of democratic governments, and contributes to the solution of problems through democratic processes. As regards to the environment, sustainable development approaches natural resources, the fragile natural environment, and the man-made environment with great respect, while also contributing to the improvement of social and economic growth policies (Delitheou & Karagianni, 2020). Yet it is strategies and their implementation that lay the foundation for the success of a potentially sustainable city – a sustainable Athens, in this case. At this point, the strategies also include estimating the potential of a city’s tourist growth, although it should be noted that caution is necessary so that the resources are neither underused – thus resulting in low tourist demand – nor depleted – thus resulting in a radical change of the city’s profile, which would lead to decreased interest in visiting it (Katsoni et al., 2012). Indeed, the requirements for a city like Athens to be sustainable cannot be limited to visions; there need to be investments in energy networks, energy efficient buildings, environmental protection, and sustainable transportation, as well as investments in high capacity and connectivity networks. Such investments are of course accompanied by ambitious business reforms – “Greece 2.0”, 27/04/2021, at the European Union. Nearly all cities that wish to emerge as sustainable implement a variety of strategies in their plans so as to face the competition and improve their standing in the global scale of sustainability. Management experts have always talked about strategies: “A strategy is defined as a set of plans-programs-actions, the implementation of which allows for the achievement of a determined goal” (Chytiris, 2006). Unlike the previous definition, strategic decision-making is a sequence of decisions and random events, with the decisions made depending on the effects of random events that will take place at a later time (Anderson, Sweeney, Williams & Martin, 2014). Another distinction is to be made with strategies that achieve a goal through action plans, with the results also depending on the characteristics of their effects (Tzortzakis & Terzidis, 2004). As to the framework of sustainable cities, the European Environmental Agency reviews principles and individuals that are in the position to make sustainable city policies and plans for urban sustainability, with features such as: cyclical cities, authentic cities, low carbon emissions cities, green cities, inclusive cities, healthy cities, active motility through cycling and walking, and recycling systems (Hans Bruyninck, Executive Director of the European Environmental Agency; latest amendment of the text: 16/11/2021). There is also the view that the sustainability potential of a city stems from its geographical position – for instance, significant amount of sunlight and excellent climate. Such a city could ensure pleasant living conditions and even prevent social exclusion, thus increasing its potential to be deemed a sustainable city (Dimitris Panagiotopoulos, Professor at the University of Athens, 28/01/2016). Undoubtedly, none of the aforementioned suffices for Athens to emerge as a sustainable city of high standing.

Setting the Goals of the Study: If Athens wants to emerge as a sustainable city, it should study the case of another European city, Vienna, which managed to reach the top of the list of sustainable cities around the world in 2022; that same year, Athens was positioned at number 73 (The LiFO team, 23/06/2022, <https://www.lifo.gr/sites/default/files/styles/lifo>). What we know about Vienna is that it is very clean and very green; it cares about its citizens, actively implementing socioeconomic policies, mostly in the field of healthcare, with excellent hospitals such as the University Hospital at the center of the city. The Viennese culture is to be open to everyone, at every event (winter and summer). The citizens of Vienna exhibit exemplary behavior, towards both the natural environment and the man-made environment.

A map showing Vienna topping the livability index, dated March 2022, is presented below.



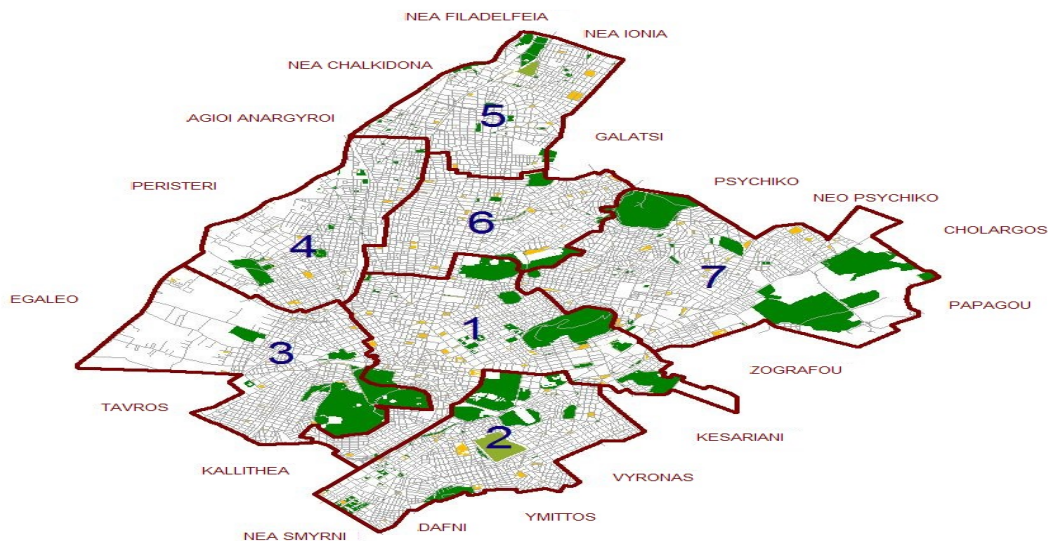
Source: EIU

Main Research Elements for the Potential Sustainability of Athens: The Municipality of Athens is divided into seven (7) Municipal Units, as presented in the following table.

Map of the Municipality of Athens – the area under study

MUNICIPAL UNIT	QUARTERS	AREA (acres)
1 st	ILISIA, KOLONAKI, LYKAVITOS, MOUSEIO – EXARCHEIA, AG. KONSTANTINOS – PLATEIA VATHIS, EMPORIKO TRIGONO – PLAKA, KOUKAKI – MAKRYGIANNI, PEDIO AREOS – EVELPIDON	6,786
2 nd	ZAPPEIO, ODEIO, PAGKRATI, PROFITIS ILIAS, GOUVA, DOURGOUTI, NEOS KOSMOS, A NEKROTAPEIO, STADIO	4,861
3 rd	AKROPOLI, ANO/KATO PETRALONA, ROUF, VOTANIKOS	6,053
4 th	KOLONOS, OSE, AKADIMIA PLATONOS, KOLOKYNTHOU, SEPOLIA, NIRVANA	4,489
5 th	AGIOS ELEFATHERIOS, PROMPONA, RIZOUPOLI, ANO PATISIA, PATISIA	4,018
6 th	PLATEIA AMERIKIS, PLATEIA ATTIKIS, ANO KYPSELI, KYPSELI, NEA KYPSELI	4,012
7 th	GKYZI, POLYGONO, GIROKOMEIO, ELLINOROSON – ERYTHROS, AMPELOKIPI, GOUDI, KOUNTOURIOTIKA	7,733
MUNICIPALITY OF ATHENS		37,954

Map of the Municipality of Athens – the area under study



Our meeting with Municipality of Athens officials in May 2023 was of particular interest; they provided us with useful information, particularly on the “plan for the re-creation of Athens as a sustainable city”. These officials assured us of the consistent implementation of programs aiming for Athens becoming a modern, safe, sustainable city that is accessible to all. What some of the participants told us outside of the questionnaire was that a strict implementation program was required, with a focus on improving the development rate of the city center, utilizing the available resources in a “smart” and “efficient” manner, high quality services, infrastructure for the water and energy resources, and housing. Professor Athanasiou supports that, for every potentially sustainable city, flexible scopes need to be created for the purpose of attracting investments through the privatization of natural resources, turning them into the main vehicle for creation, development, and the implementation of strict rules regarding the protection of the environment (Athanasiou, 2012). Of course, the key to a sustainable city is its citizens; sustainability is for their own benefit. Therefore, the central question of this study was: Can Athens be internationally deemed a sustainable city? Firstly, strategic goals were set for a balanced development, Athens’ role on the global stage, increased competitiveness, and growing activities in the fields of production, employment, etc. The Municipality of Athens Operational Plan for 2012-2014 concerned the implementation of the vision for a sustainable Athens, with a proper management of its resources (natural and financial) and public goods, the efforts towards a clean, friendly, and safe city, which protects its disadvantaged citizens and provides them with opportunities for their social inclusion; a city encouraging innovation. The following Operational Plan, for 2015-2019, concerned strategies for Athens as a city with an upgraded urban landscape, a city where all human rights are respected, a city fighting to be globally recognized as a sustainable metropolis. Through the Municipality of Athens Operational Plan, Athens has been trying to implement the Municipality’s resolutions so as to receive the distinction of sustainability on the global assessment scale. Nevertheless, the participants have noted technological shortfalls, underdevelopment, and marginalization, phenomena accompanied by chaotic and sick images of the city and its local communities. Finally, the city is lacking in systems of electronic governance and a digital city portal that goes beyond the simple, baseline informatics (Karydas, 2007).

Identity of the Study: The study conducted was a quantitative study. The sample comprised 88 students – 37 male and 51 female. The area in which the questionnaires were distributed was Athens. The time frame of the study was from April 2023 to July 2023.

The questionnaire consisted of approximately 20 questions, and the answers to the questionnaire were processed via Microsoft Excel. Participation was voluntary and the participants were informed that the study complied with the code of ethics and that any findings would be published exclusively for scientific/research purposes.

The questionnaires were processed by analyzing specific questions-answers

Demographics

Gender: Male = 37 Female = 51 Total = 88
Age: 18-23 = 59, 24-28 = 17, ≥29 = 12

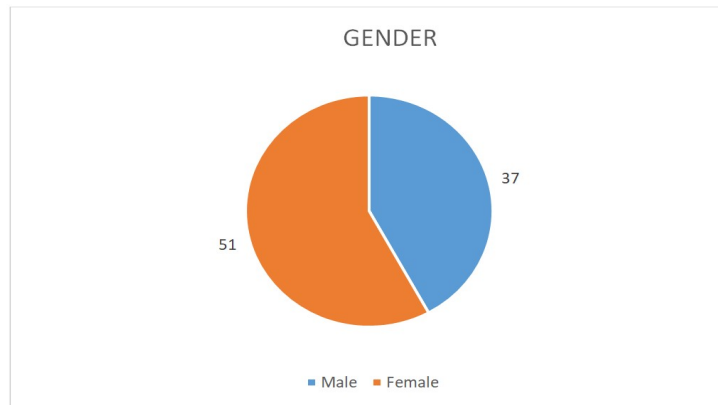
Field of studies

Department of Economy and Sustainable Development = 28
Postgraduate in Sustainable Development = 4
School of Humanities, University of Athens = 66

Statistical analysis

Demographics

Gender: Male = 37 Female = 51



Pie chart showing the sample distribution by gender.

Age: 18-23 = 59, 24-28 = 17, ≥29 = 12

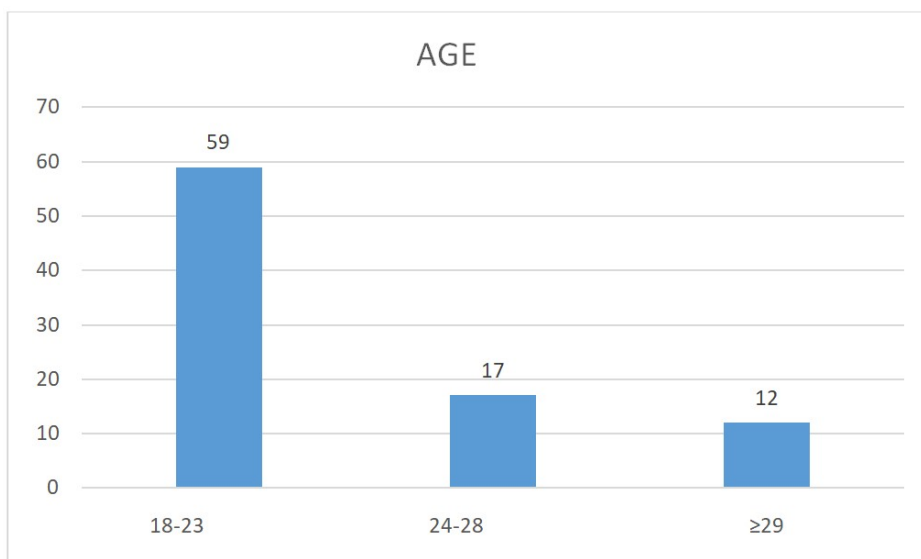
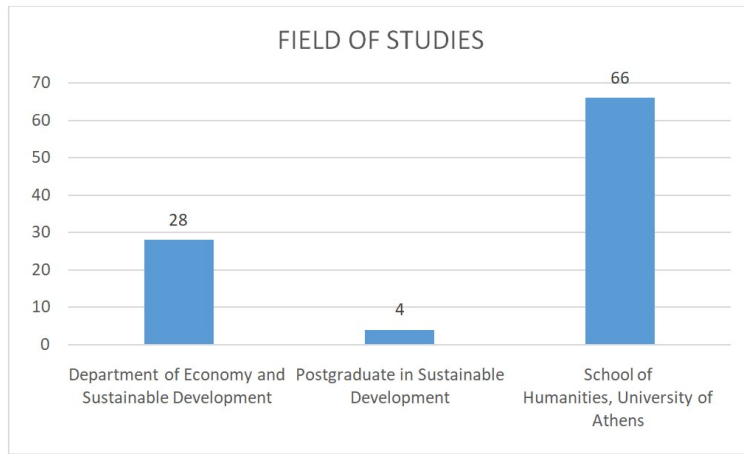


Chart showing the age scale of the participants.

Field of studies:

Department of Economy and Sustainable Development = 28
 Postgraduate in Sustainable Development = 4
 School of Humanities, University of Athens = 66



Distribution of the sample by field of studies: 28 students of Economy and Sustainable Development, 4 postgraduate students of Sustainable Development, and 66 students of Humanities

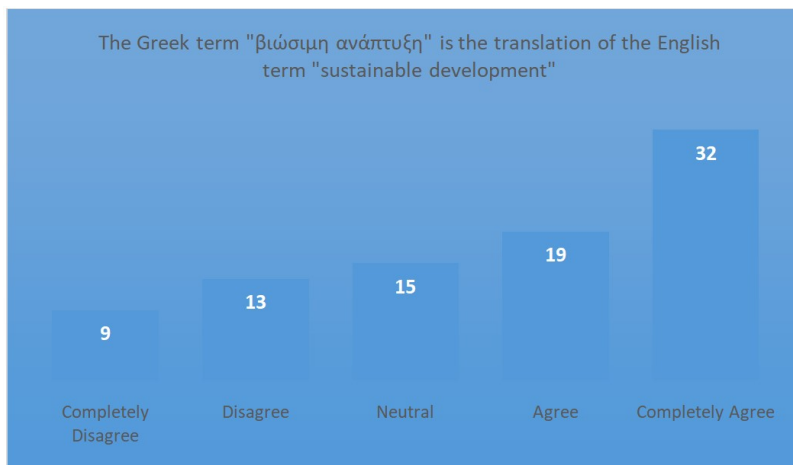


Chart showing the participants’ opinion on the Greek translation of the term “sustainable development”. Unfortunately, a significant percentage of the students was unaware of the English term.

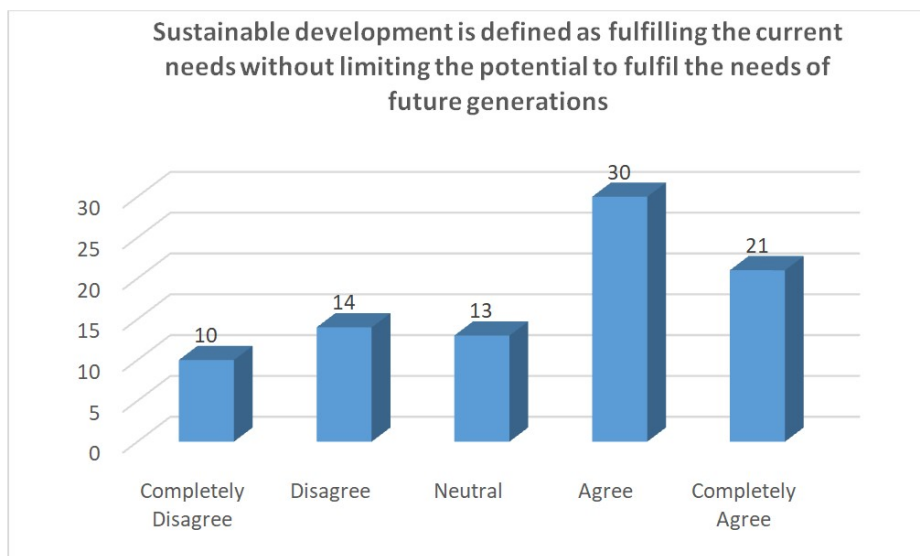
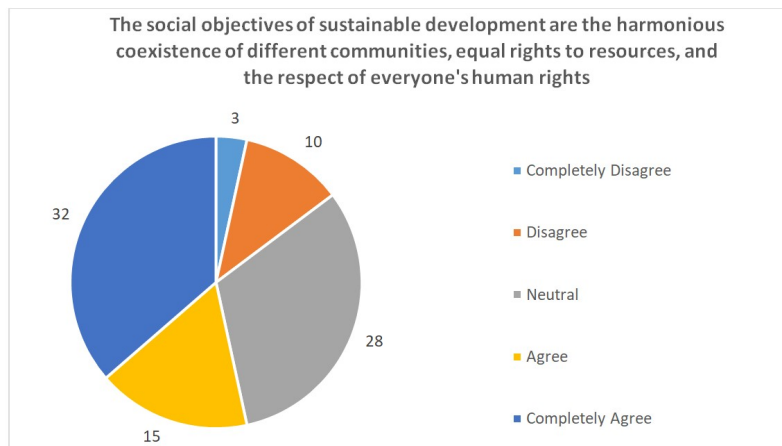


Chart showing that a significant percentage of the participants is unaware of the true meaning of sustainable development.



Pie chart showing the participants’ opinions on the social objectives of sustainable development. The fact that even a small percentage of the sample disagrees with the deeper meaning of the social aspect of sustainable development should trouble the academic world.

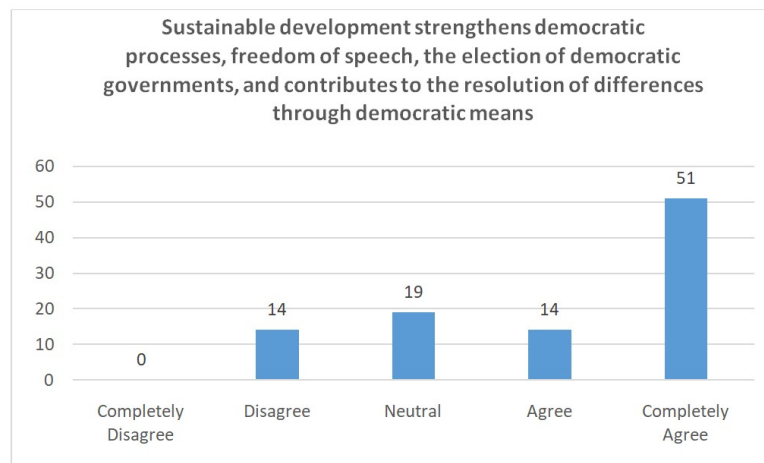
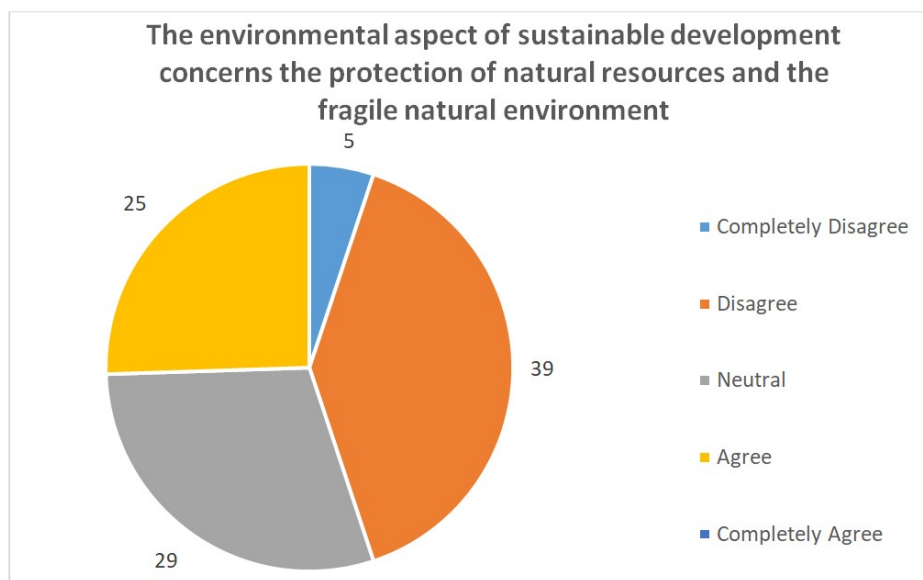


Chart showing the participants’ understanding of the extension of sustainable development to other fields. The degree to which the students understand how sustainable extends to other fields is reassuring.



Pie chart showing the participants’ opinions on the environmental aspect of sustainable development. It is evident that some of the students have not fully comprehended this aspect, therefore there is still a long way to go for it to be cemented in practice.

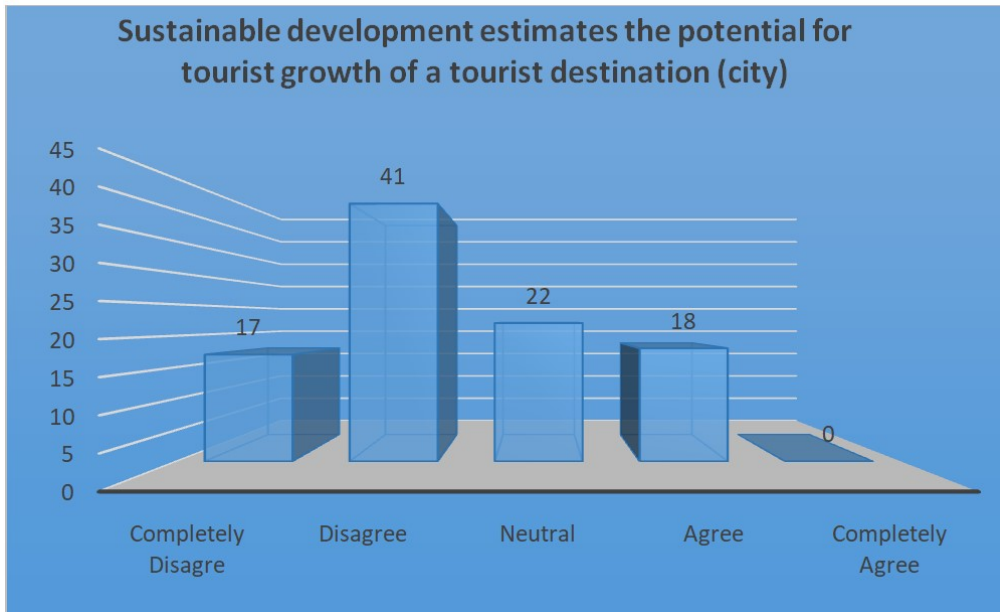


Chart showing the participants’ views on the relationship between sustainable development and the potential for tourist growth.

A significant percentage believed that sustainable development is unrelated to tourist growth, exhibiting a lack of knowledge of the scopes of sustainable development.

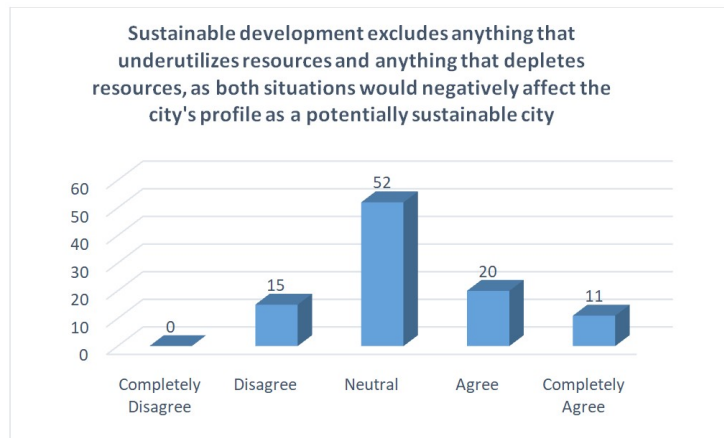


Chart showing the participants’ understanding of the relationship between sustainable development and how resources are used. Over 50% of the participants maintained a neutral stance on this subject, thus questioning the basic principles of sustainable development.

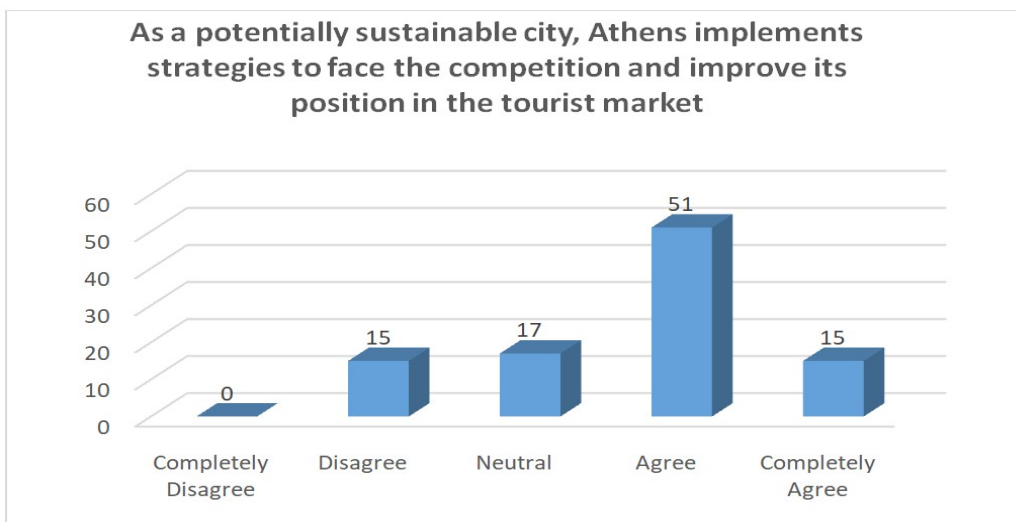
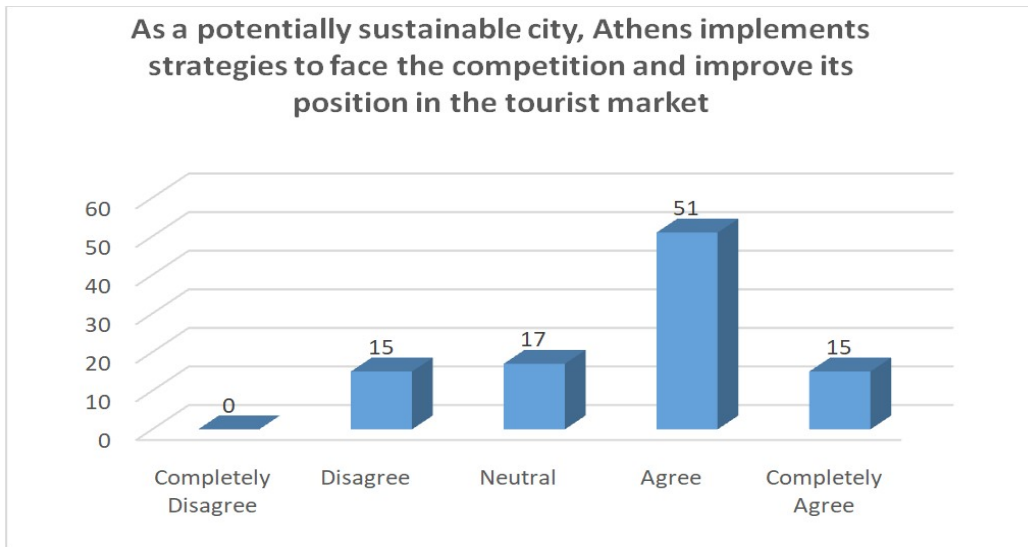


Chart showing the participants' opinions on the potential of Athens as a sustainable city through the strategies it implements regarding tourism.



The majority of the participants agree with the parameters involved in Athens' potential as a sustainable city, which is encouraging.

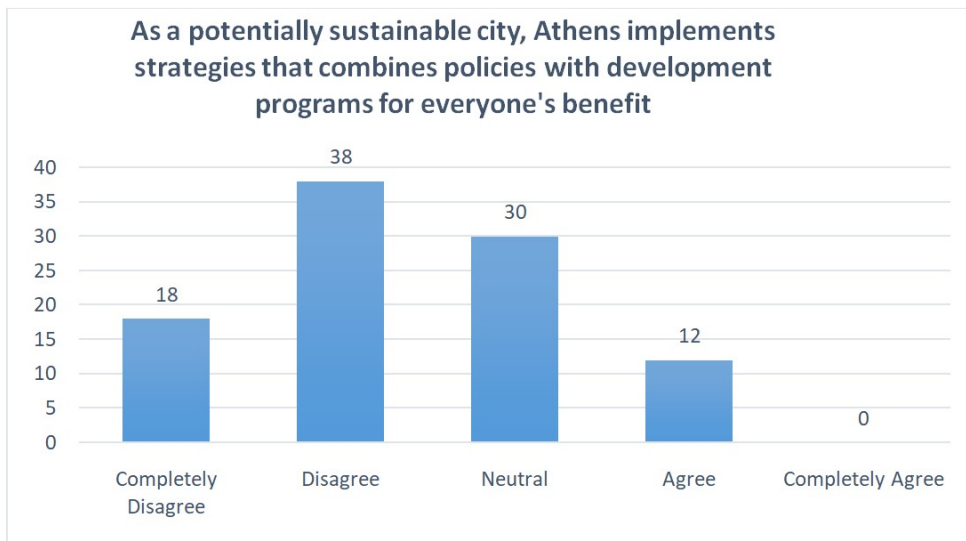


Chart showing the participants' opinions on the potential of Athens as a sustainable city through the strategies it implements regarding the combination of policies and development programs. In this case, the majority disagrees with the combination of policies and development programs, despite agreeing with the parameters involved in the previous question.

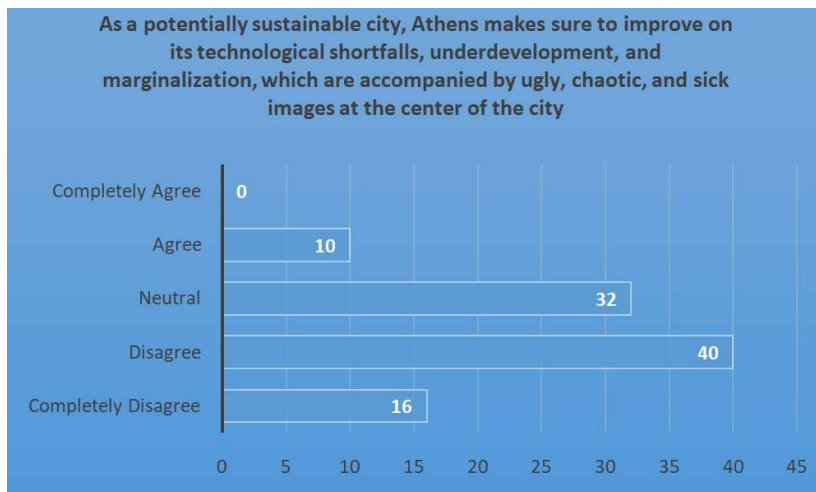


Chart showing the participants' opinions on the potential of Athens as a sustainable city through the strategies it implements to improve its shortfalls. The popular opinion seems to be that the city's efforts to improve its shortfalls are mostly unsuccessful.

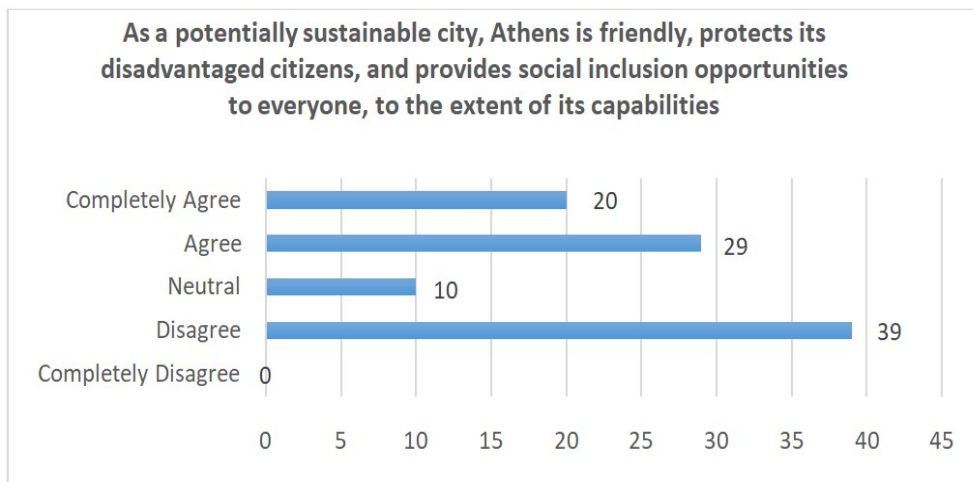


Chart showing the participants' views on whether Athens protects the disadvantaged and offers opportunities for social inclusion. A significant percentage of the students does not agree that Athens offers protection to the disadvantaged and opportunities for social inclusion.

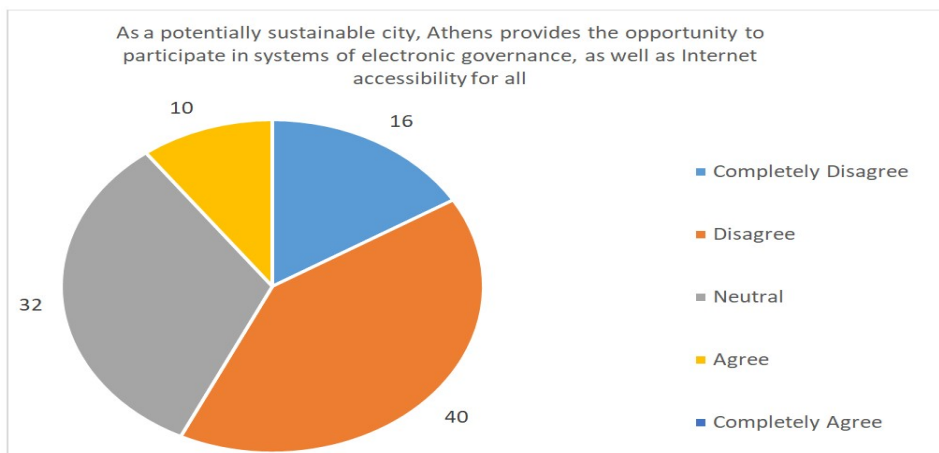


Chart showing the participants' views on Athens providing opportunities of electronic accessibility. The sample appears to be divided on this subject, which indicates that perhaps the question was not fully understood.

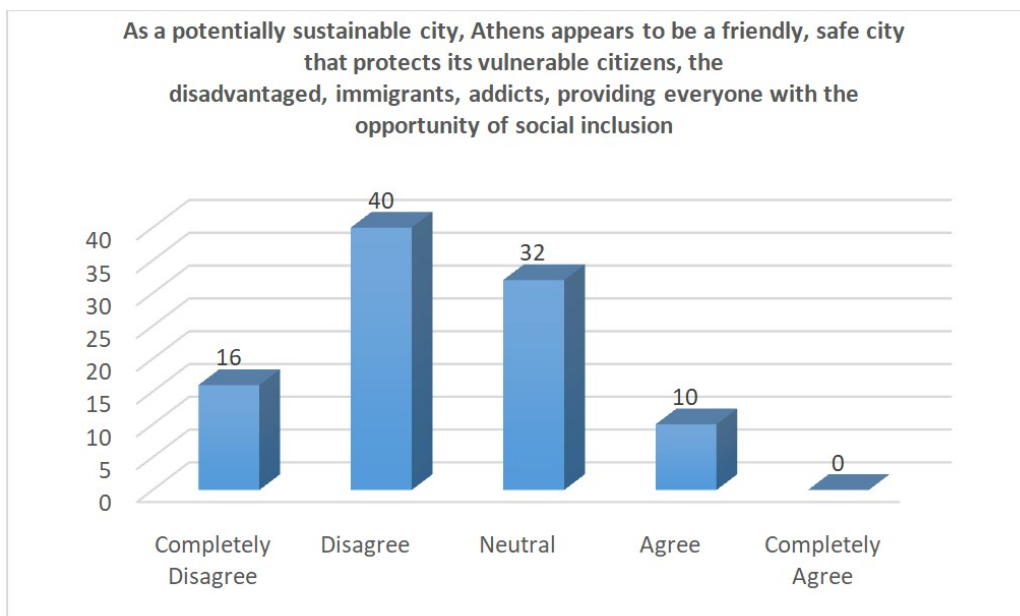


Chart showing the participants' opinions on Athens' profile. Athens' profile as a friendly, safe, protective, and inclusive city is majorly doubted.

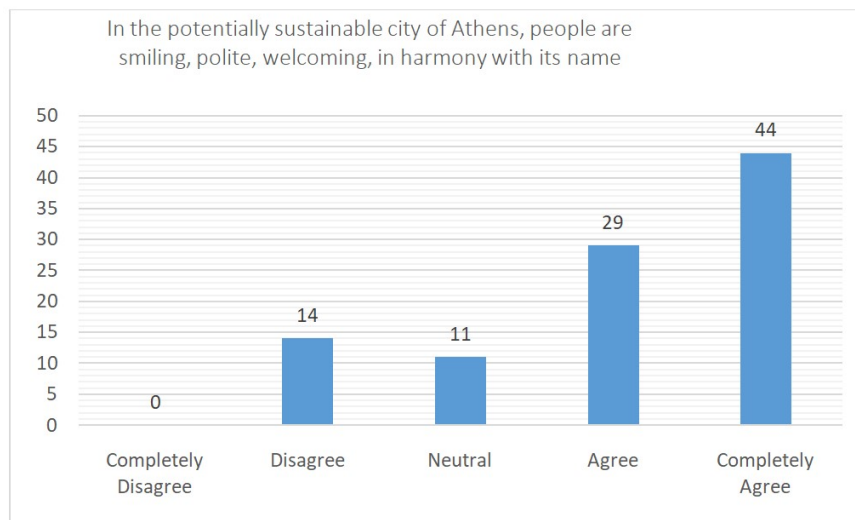
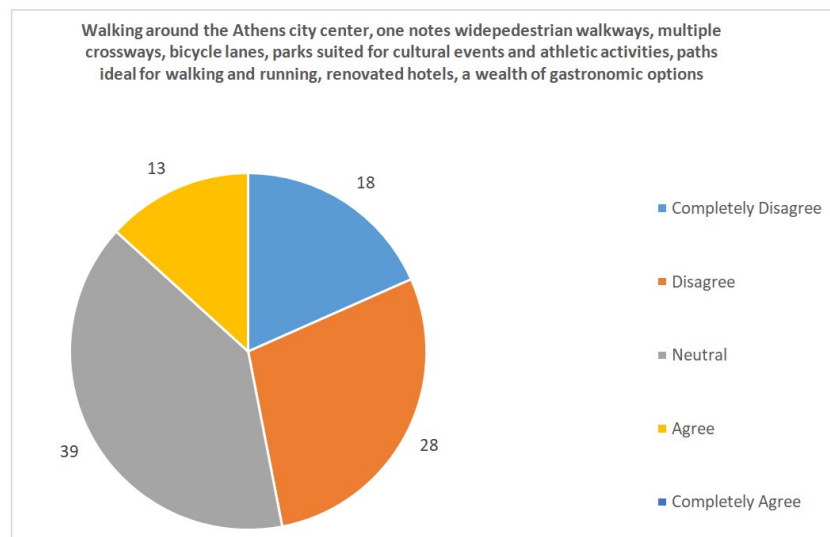


Chart showing the participants' views on the citizens of Athens and their attitude. As regards to the people of Athens, the vast majority agrees that they are positive and welcoming, in harmony with the city's name.



Pie chart showing the participants' views on the image of the Athens city center. While the Municipality of Athens may be willing, it has yet to implement the strategies/policies that would upgrade the city center, according to the majority of the participants.

General Conclusions of the Study

First of all, it should be noted that in a Likert scale analysis, the neutral position enhances the positions of agreement or disagreement when their values are high. Every country on the planet is currently in fierce competition for the common goal of attracting new investors, new businesses, and as many visitors/tourists as possible – all this based on the advantages each city possesses. They are all thus trying to claim a high standing of the global map of attractive and, most importantly, sustainable cities. Early on in the study, we noted that a percentage of the participants are unaware of the meaning of sustainable development, as they are unaware of the social aspect of sustainable development, which we believe should concern academia. It is reassuring, however, that the participants did understand that sustainable development extends to other fields as well. When we reached the environmental aspect of sustainable development, there were students who seemingly did not perceive its effectiveness, which we interpret as a significant distance left to be covered in order for the term to be cemented in practice. In addition, a significant percentage of the participants had no opinion on the estimation of the potential for tourist growth as part of sustainable development, which means that there is ignorance of its scopes. When we got to Athens as a potentially sustainable city, in particular, we noted that the majority of the participants were not convinced about its implementation of strategies to face the competition and improve its standing in the global tourist market, especially as regarded to the point that Athens is combining policies with development programs for the benefit of everyone. In fact, the vast majority disagreed with the claim that Athens is making improvements as to its technological shortfalls, underdevelopment, marginalization, and the consequent ugly, chaotic, and sick image of the center of the city, seeing no such improvements. Moreover, less than half of the participants viewed Athens (as a potentially sustainable city) as a friendly city that protects its vulnerable citizens and provides everyone with opportunities for social inclusion, to the extent of its capabilities. Athens also claims to be a friendly, safe city that protects its vulnerable citizens,

the disadvantaged, immigrants, and addicts, providing everyone with the opportunity of social inclusion, without exceptions, and the majority again was skeptical towards this claim. There is also little recognition of Athens providing everyone with the opportunity to participate in systems of electronic governance and having Internet services accessible to all, as it goes against their experiences. The only claim about Athens as a potentially sustainable city with which the participants agreed was that its citizens are smiling, polite, welcoming, in harmony with the city's name.

Suggestions

The conditions are there for Athens to emerge and be distinguished as a sustainable city of high standards, yet it needs to make significantly greater efforts and run a significantly longer distance for it to become reality. Athens needs to focus more on investors that will contribute to the improvement of its citizens lives. Furthermore, since it is a city of great cultural heritage, the city officials need to place emphasis on cultural/museum tourism. Emphasis should also be placed on gastronomic tourism, since the Mediterranean diet in general and Greek cuisine in particular are known and esteemed. Further action that can be taken by Athens includes taking better advantage of the European packages, using them exclusively for works of infrastructure and upgrades. When one walks around the city center, everything may look fine at first glance, but then the tragic images of the city center squares, unfit for a developed country, are inescapable. Specific, concentrated efforts need to be made to change this, primarily at a cultural level. Yet practical changes should not be ignored – wider and better pedestrian walkways, as well as bicycle lanes, since the bicycle constitute the main means of transport for many; large parks with dedicated paths for walking, running and cycling; renovated hotels and modern food and drink services. Athena, the goddess of wisdom and knowledge, protector of the human arts and useful occupations, welcomes all visitors. The Acropolis and the majestic temple therein, the Parthenon, are two architectural wonders which only gain value as time goes by, considered as some of the most emblematic monuments in the world. Athens should call on Athenians who live abroad and visit the city on their holidays to shape the public opinion at the countries where they live, highlighting the advantages of the city. Athens has a wealth of resources that make it an ideal tourist destination, including its beautiful natural environment, its sunlight, its world-renowned cultural heritage, its cuisine, and its citizens friendliness and welcoming behavior towards strangers – the legacy of hospitality left behind by Xenios Zeus. As a metropolis, Athens should aim for a spot at the Top 20 of the global assessment scale regarding sustainable cities of high quality, leaving the 73rd place it got in 2022 forever behind.

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