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The development of the level of environmental awareness among the residents in cities and residential neighborhoods

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Abstract: This research aims to develop and increase the level of environmental awareness regarding climate change and sustainability issues among individuals in cities and residential neighborhoods. The current research methodology is descriptive and analytical, based on a questionnaire tool consisting of (34) questionnaires. It was designed on the basis of (12) axes covering environmental awareness and environmental problems to obtain more accurate results. The research finds that there is a lack of environmental awareness among most individuals for many reasons, such as weak environmental culture and low educational level, in addition to a lack of interest in climate change issues. The research proposes several recommendations that are necessary to enhance the confidence of individuals and the population in technology, and promote environmental participation among all those concerned with environmental awareness, starting with decision-makers, politicians, government agencies, non-profit organizations, the private sector, and the population.

Keywords: *Algeria, Climate change, COP 28, Residential neighborhoods, Slum, The level of environmental awareness.*

1. Introduction

The importance of environmental awareness has been progressively recognized in recent years by the global community, scientists, decision-makers, government sectors, and the private sector [1]. As a result of the increasing interest in issues of environmental awareness, many international conferences were held, such as the Stockholm Conference in 1972, the Rio de Janeiro Conference, the Earth Summit in 1992, and the COP 28 Conference in the Emirates, in which many countries and decision -makers.

Several international conferences, involving the Stockholm Conference in 1972, the Rio de Janeiro Conference, the Earth Summit in 1992, and the COP 28 Conference in the United Arab Emirates, were organized as a consequence of the growing interest in awareness of environmental issues. Several countries and decision-makers participated in these summits.

Academics and practitioners across multiple disciplines, including architecture, urban planning, the field of sociology, ecological research, and a lot more, are familiar with and continue to be interested in the challenging concept of environmental consciousness [2]. The research holds significance as it establishes a direct link between environmental awareness and the mental well-being of both residents and individuals. Environmental awareness is also more important to achieve because of the deterioration of natural resources, increasing waste, changes in the climate, reducing vegetation cover, and increasing global temperatures [3]. Additionally, there appeared to have been an international recognition of the hazards related to these environmental issues, contributing to the notion of "environmental awareness" [4].

The researchers argued that these environmental issues could potentially be addressed and reduced through increased revenue and industrial growth [5, 6] providing financial support for environmental

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preservation [7, 8] although if there is more focus on environmental problems internationally, it could not be achieved. He has been described as having in-depth knowledge of the environmental concerns that constitute danger to the environment. Chen, et al. [9] based on three main elements: comprehension of danger practices, attitudes, and emotions [10].

Environmental consciousness has an effect on the health of individuals and their quality of life [11]. There are many variables that affect environmental awareness, however, the most important ones are the cultural, social, educational, and quality of life of people as well as communities [12].

Many researchers attempted to examine the notion of environmental awareness in the late 1960s in the United States of America [13].

The researcher (Erskin) investigated and evaluated environmental issues during the period(1965–1970). The phases of the growth of environmental awareness were discovered by researcher Dunlap, who referred to it as the "attention cycle" according to five important stages [14]:

- The stage before the emergence of environmental awareness: any state before the occurrence of the problem, in which the environmental, social, and economic conditions are deteriorating.
- The stage of disturbing discovery of environmental problems and enthusiasm for solving them: that is, environmental problems attract the attention of the public, and thus generate a kind of enthusiasm and rush to solve them.
    - The time period before the rise in environmental awareness: any scenario when the condition of the economy, society, and the environment has been deteriorating before the problem's emergence.
    - The startling realisation that there are many environmental issues and the subsequent frenzy for addressing them: in simple terms, when environmental concerns come to the public's attention, there is a rush to solve them.
    - Realizing the scope of environmental issues: it refers to the innovative decrease in media environmental issues the increased effort and boredom associated with them.
- The phase of constant decline: this relates to the innovative reduction in media attention to environmental issues as a result of the issues' increased effort and boredom.
- The post-problem phase is the final stage, during which the publics focus shifts from environmental awareness issues to newly raised ones. This leads to increased public awareness of these new issues or regular warnings about environmental awareness.

In the same context, the research problem is to find solutions in order to enhance the level of environmental awareness and address issues of climate change and sustainability.

The research aims to explore and develop the level of environmental awareness regarding climate change and sustainability issues among individuals and communities and educate them in cities and residential neighborhoods. Through this research, we aim to contribute to the advancement of environmental awareness and sustainable practices and address the urgent need for a more sustainable and resilient future and better quality of life for humans.

The novelty of this research is the addition of new measurement standards to measure environmental awareness in the fields of urbanization, urban planning, sustainable city management, and architecture.

This research is distinguished from previous studies by being comprehensive and accurate, taking into account gender, marital status, educational level, and standard of living for the residents of Sidi Slimane neighborhood. (34) questions were asked of the participants, and the model (12) included an important axis related to environmental awareness and problems.

This research's value primarily has implications for residents, policymakers, architects, urban planners, and urbanists. Regarding assessing the level of environmental awareness among people in neighborhoods and cities, these criteria, themes, and survey inquiries are extremely useful. This research will improve the quality of life for people living across various regions of the world, especially slums, and contribute to achieving the environmental aspect of sustainability by increasing and encouraging ecological awareness among the general public.

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2. Materials and Methods

According to the questionnaire tool, the research paper's methodology is descriptive-analytical . The following phases are used for assessing the residents of Bousaada City's Sidi Slimane neighborhood's level of environmental awareness:

1. Review previous studies related to environmental awareness.
2. Determining the factors (axis) for measuring the population's level of environmental awareness.
3. We are preparing the questionnaire questions aimed at the population
4. Analyzing the obtained results.

Figure 1 presents the various phases of the population awareness assessment process for environmental awareness concerns, starting with an analysis of the previous literature on population environmental awareness and proceeding to the determination of the axes and indicators to be evaluated. The following phase is to prepare the form for the questions for the survey, then collect and evaluate the survey's findings.

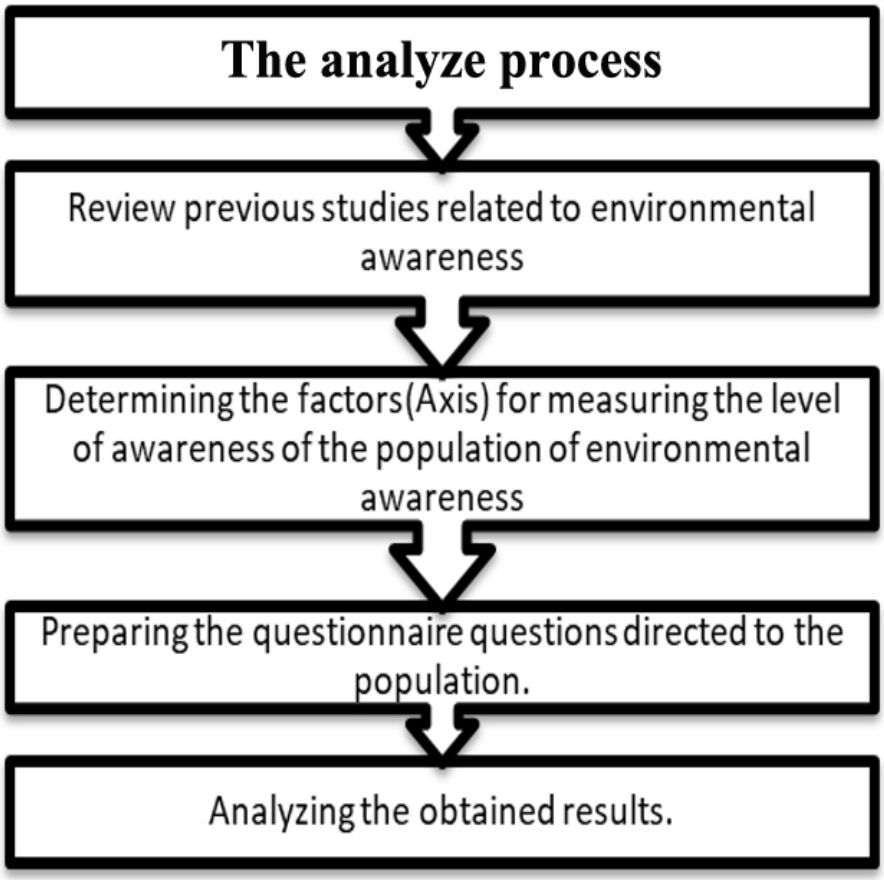

Figure 1.
The analysis processes.

2.1. Case Study

Sidi Slimane is a residential neighborhood slum located in Algeria, in Bousaada City in the State of M'sila. This neighborhood was selected as a case study, for many reasons; it is one of the largest slums in Boussada City. This individual residential neighborhood is characterized by the absence of the environmental dimension of sustainability, in addition to the weak environmental awareness. The area of Sidi Slimane is estimated at (115) hectares, and its population is (45,000) people [5].

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Figure 2 presents the location of the study case, the Sidi Slimane neighborhood, first, for the city of Bou Saada and then for the country of Algeria. This neighborhood is one of the biggest neighborhood slums in the Algerian country.

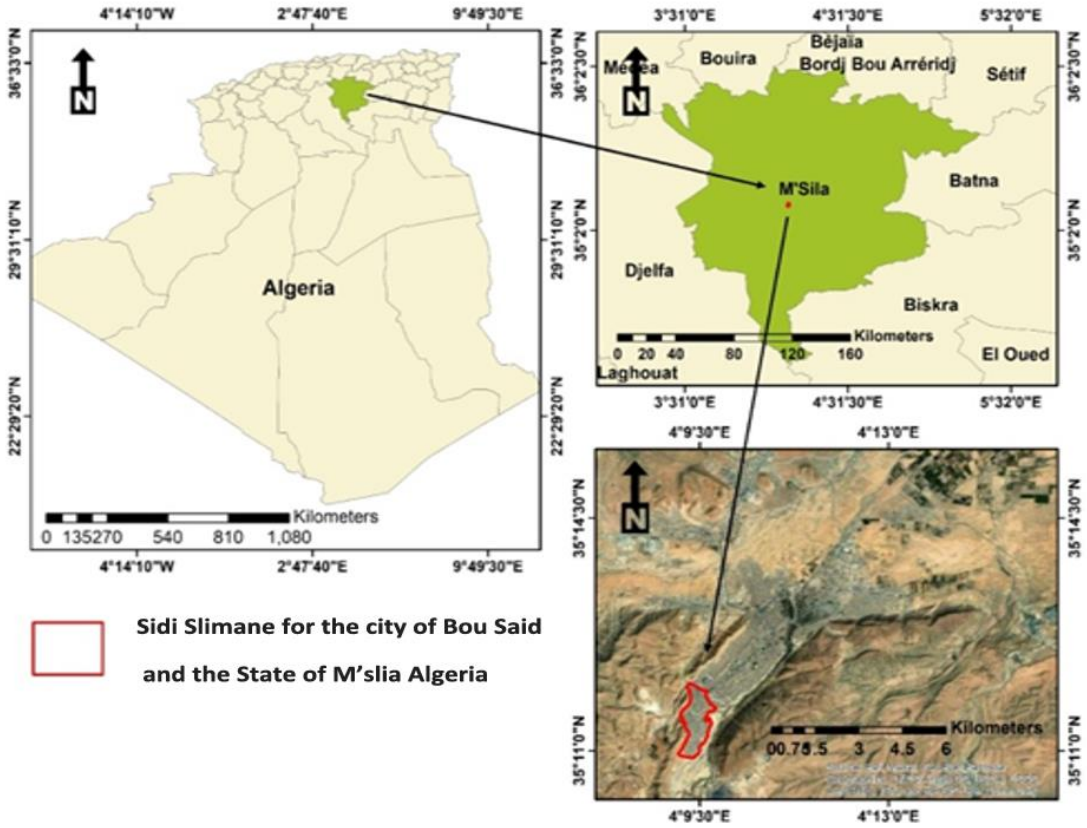

Figure 2.
Location of case study.

2.2. Materials Study Simple

The sample was chosen randomly in the field of study (Sidi Slimane neighborhood, Bousaada city), based on Morgan's graph [15]. The size of the study population (population of Sidi Slimane neighborhood): is estimated at (45,000 people) according to the Bousaada municipality census of 2018. According to Morgan's table: If the size of the community ranges between (40000-50000), then the study sample lies between (380 - 381). Therefore, the population of the field of study (45,000 people) lies between (380 - 381), and therefore we take the average of the study sample: 381 + 380/2 = 380.

Figure 3 presents the increasing requirement for an accurate statistical population in scientific studies, which led to a demand for an accurate way of determining sample size. To address the existing gap, Krejcie and Morgan [15] developed a table for determining sample size for a particular population for simple reference. We applied this method to determine the study sample.

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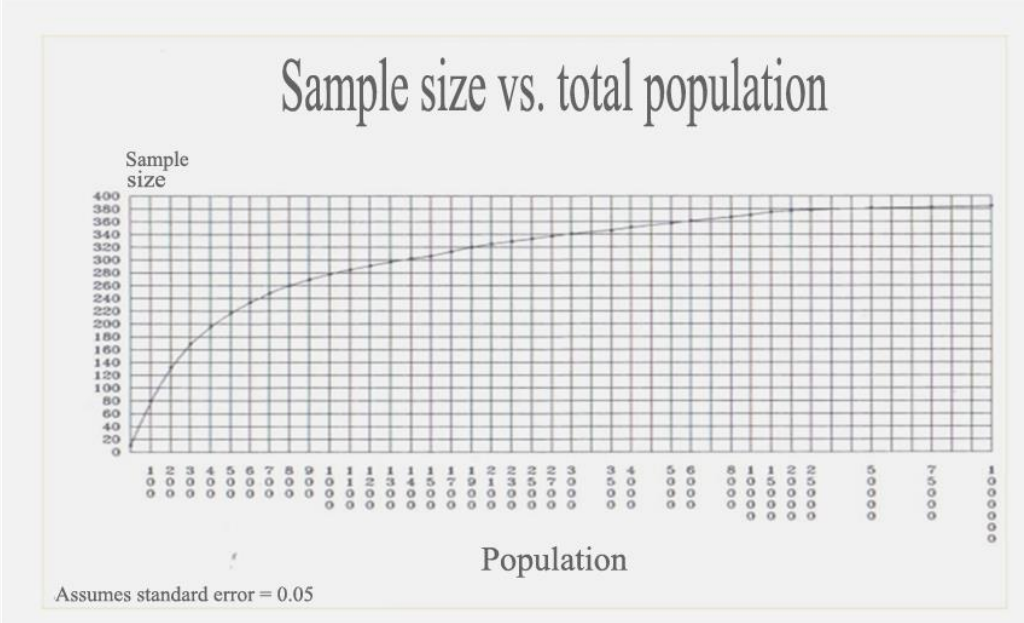

Figure 3.
Morgan's graph to determine the sample size of the study.
Source: Krejcie and Morgan [15].

3. Results

The axes and questions of the questionnaire addressed to the residents of the Sidi Slimane neighborhood in Bousaada were determined based on the previous studies mentioned, taking gender, marital status, educational level, and standard of living for the residents of the Sidi Slimane neighborhood into account (34) questions were asked of the participants, and the form (12) covered an important axis related to environmental awareness and problems Appendix 1 is as follows:

- Axis (1): enjoying nature.
- Axis : (2) Environmental concern.
- Axis (3): Intention to support.
- Axis (4): Rejection of exemption/confidence in science and technology.
- Axis (5): Human Dominance / Limitations of Growth.
- Axis (6): Rationalizing energy consumption.
- Axis (7): Using recycled materials.
- Axis : (8) Environmental culture.
- Axis (9): Environmental Responsibility.
- Axis : (10) Environmental Participation.
- Axis (11): The culture of using sustainable transportation.
- Axis (12): Waste.

Some axes and criteria for measuring environmental awareness from previous studies that did not fit the nature and culture of the field of study were cancelled, and the researchers added some new axes, such as (the axis of environmental responsibility, the axis of environmental culture, the axis of waste, the eradication of concern, and environmental concern).

3.1. The First Axis: Enjoying Nature

Question 1: Do you prefer to spend the weekend in natural areas or in residential areas?

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- (68.16%) of the study sample's population prefers to spend the weekend in residential areas (i.e., at home and within the field of study), which explains the population's lack of transportation and financial ability to visit natural areas.
- (31.84%) of the study sample's population prefers to spend the weekend in natural areas, which explains the availability of some modes of transportation (such as cars, motorcycles...) and the desire for entertainment.

Table 1 displays the questionnaire's results. Do you prefer to spend your weekend in natural regions or in residential neighborhoods ?

Table 1.
Do you prefer spending the weekend in natural areas or in residential areas?

Q	In natural areas?	In residential areas?
The number	121	259
The ratio	31.84%	68.16%

Source: By the researchers based on the results of the questionnaire, 2024.

Question 2: Do you feel enjoyment when going to natural areas?
Table 2 displays the questionnaire's results. Do you enjoy going to the natural areas?

Table 2.
Do you enjoy going to the natural areas?

Q	Yes	No
The number	101	279
The ratio	%26.58	%73.42

Source: By the researchers based on the results of the questionnaire, 2024.

(73.42%) of the study sample do not enjoy the natural areas because of a loss of desire to go to the natural areas as a result of the deterioration of the standard of living and poverty, which negatively affects the psyche of the population so that they do not think about enjoying nature, but they spend the majority of their time doing some work for cheap amounts of money. (26.58%) of the population enjoys visiting natural areas and considers them to be places to relax and enjoy the scenery.

Question 3: Is being in nature a great stress reducer for you?

(89.74%) of the study sample do not believe that being in nature significantly reduces stress for them, which explains why most people do not visit natural areas, the lack of financial resources and transportation, and the population's low standard of living. (31.05%) of the study sample believe that being in nature is a great stress reliever for them, which explains the orientation of a small number of residents to natural areas and the desire to listen and relieve stress and anxiety, as well as the availability of transportation for some residents, as previously mentioned.

Table 3 displays the questionnaire's results. Is being in nature a great stress reducer for you?

Table 3.
Is being in nature a great stress reducer for you?

Q	Yes	No
The number	118	341
The ratio	31.05%	89.74%

Source: By the researchers based on the results of the questionnaire, 2024.

3.2. Axis: (2) Environmental Concern

Question 4: Do you feel sad to see the environment destroyed?

97.63% of the study sample's population is unconcerned about the destruction of the natural environment, which explains their lack of interest in environmental protection and sustainable

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development issues. 2.37% of the study sample's population expresses sadness over environmental destruction, a minuscule percentage compared to those who take care of nature.

Table 4 shows the findings of the questionnaire. Does it sadden you to see the natural environment destroyed?

Table 4.
Does it sadden you to see the natural environment destroyed?

Q	Yes	No
The number	9	371
The ratio	2.37%	97.63%

Source: By the researchers based on the results of the questionnaire, 2024.

Question 5: Is random construction (without a permit) considered destructive to many natural areas?

(98.16%) of the study's population do not see the increase in random construction (without a license) as the destruction of many natural areas, as they see constructing illegal random housing as their right to own housing; as for the issue of environmental destruction, they view it as the responsibility of the municipality.

(1.84%) of the study's population believe that the increase in random construction (without a permit) is destroying many natural areas, which is a very small percentage compared to the percentage of the opposite view, and this explains their level of awareness, and interest in protecting and preserving the environment.

Table 5 shows the findings of the questionnaire. Is random construction (without a permit) considered destructive to many natural areas?

Table 5.
Is random construction (Without a permit) considered destructive to many natural areas?

Q	Yes	No
The number	7	373
The ratio	1.84%	98.16

Source: Made by the researchers based on the results of the questionnaire, 2024.

3.3. Axis (3): The Intention of Financial Support

Question 12: If you secure additional income, would you like to support associations to carry out environmental activities?

We can learn the following from reading graph:

(100%) of the population of the study sample, that is, the entire population, have no intention of supporting associations with money to carry out environmental activities,. This can be explained by the population's lack of financial capabilities, the deterioration of the standard of living, and the lack of attention to environmental issues. Therefore, the population does not provide any financial support, perceiving the municipality as the primary source of funding for these associations.

Table 6 shows the findings of the questionnaire. If you secure additional income, would you like to support associations to carry out environmental activities?

Table 6.
If you secure additional income, would you like to support associations to carry out environmental activities?

Q	Yes	No
The number	0	380
The ratio	0%	100%

Source: By the researchers based on the results of the questionnaire, 2024.

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3.4. Axis (4): Refusal to Exemption/Trust in Science and Technology

Question 13: Can most of the environmental problems be solved through the use of modern technologies?

(53.42%) of the study's population do not know how to solve most environmental problems using techniques and technology, while (27.63%) of the population of the study sample do not think that most environmental problems can be solved using technology, which explains how little the population is aware of the latest technologies that contribute to solving environmental problems.

(18.95%) of the study sample's population believes that environmental problems can be solved through the use of technologies, which explains some residents' interest in modern technology and its role in problem solving.

Table 7 shows the findings of the questionnaire. Can most of the environmental problems be solved through the use of modern technologies?

Table 7.
Can most of the environmental problems be solved through the use of modern technologies and technology?

Q	Yes	No	I don't know
The number	72	105	203
The ratio	18.95%	27.63%	53.42%

Source: Made by the researchers based on the results of the questionnaire, 2024.

3.5. Axis (5): Human Dominance / Limits of Growth

Question 14: Do you think that humans are the main cause of damage to the environment?

(52.10%) of the study sample do not think humans are the primary cause of environmental damage, while (44.21%) do not know whether people are the primary cause of environmental damage, which explains why the population is uninformed and uninterested in environmental issues, in addition to the population's low educational and cultural level.

(3.68%) of the study sample believes that humans are the ones who harm the environment, which explains why a small number of residents are interested in environmental issues and their consequences.

Table 8 shows the findings of the questionnaire. Do you think that humans are the main cause of damage to the environment?

Table 8.
Do you think that humans are the main cause of damage to the environment?

Q	Yes	No	I don't know
The number	14	198	168
The ratio	3.68%	52.10%	44.21%

Source: Made by the researchers based on the results of the questionnaire, 2024.

3.6. Axis (6): Rationalizing Energy Consumption

Question 15: Do you always turn off electrical appliances and lights when you leave the house?

(78.15%) of the study sample always turn off electrical appliances and lamps when they leave the house, explaining the existence of a culture of rationalization of energy consumption among the population,. In addition to the population's poor financial ability to pay for electricity bills due to the deterioration of the population's living standard, they resort to reducing energy consumption.

(21.84%) of the study sample do not always turn off electrical appliances and lights when they leave the house, which explains the population's lack of an energy conservation culture.

Table 9 shows the findings of the questionnaire. Do you always turn off electrical appliances and lights when you leave the house?

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Table 9.
Do you always turn off electrical appliances and lights when you leave the house?

Q	Yes	No
The number	297	83
The ratio	78.15%	21.84%

Source: By the researchers based on the results of the questionnaire, 2024.

Question: Do you use bags made of environmentally friendly materials when buying groceries?

(100%) of the population of the study sample does not use environmentally friendly bags, which explains the lack of a culture of using recycled products and the absence of the application of sustainable environmental practices.

Table 10 shows the findings of the questionnaire. Do you use bags made of environmentally friendly materials when buying groceries?

Table 10.
Do you use bags made of environmentally friendly materials when buying from groceries?

Q	Yes	No
The number	0%	380
The ratio	0%	100%

Source: By the researchers based on the results of the questionnaire, 2024.

Question: Have you heard about climate change?

97.63% of the study sample had not heard about climate change, and this explains the absence of environmental culture, while 2.37% of the population had heard about climate change, which is a very small percentage.

Table 11 shows the findings of the questionnaire. Have you heard of ecologically sustainable living?

Table 11.
Have you heard of ecological sustainable living?

Q	Yes	No
The number	9	371
The ratio	2.73%	97.63%

Source: By the researchers based on the results of the questionnaire, 2024.

3.7. Axis (9): Environmental Responsibility

Question: Should anyone who pollutes the environment face punishment?

(99.21%) of the study sample do not believe that everyone who pollutes the environment should be punished, and this explains how little value and importance the people give to the environment so as to consider it an unimportant minor issue, while (0.79%) of the population believe that everyone who pollutes the environment should be punished , a very small percentage due to the fact that the environment is important to a small number of the population in the field of study, who see the need to punish polluters.

Table 12 shows the findings of the questionnaire. Should anyone who pollutes the environment be punished?

Table 12.
Should anyone who pollutes the environment be punished?

Q	Yes	No
The number	8	372
The ratio	2.103%	97.89%

Source: By the researchers based on the results of the questionnaire, 2024.

Question: Do you think that achieving environmental awareness requires residents' cooperation with local authorities, associations, and civil society?

(80%) of the study sample do not believe that achieving environmental awareness requires residents' cooperation with local authorities (municipal), associations, and civil society because they believe that achieving environmental awareness is solely the responsibility of the municipality and the concerned authorities, and that the population has no role to play; while (20%) of the population believe that achieving environmental awareness necessitates the cooperation of all previously mentioned stakeholders, including the population.. This demonstrates that some residents are environmentally aware.

Table 13 shows the findings of the questionnaire. Do you think that achieving environmental awareness requires residents' cooperation with the municipality, associations, and civil society?

Table 13.
Do you think that achieving environmental awareness requires residents' cooperation with the municipality, associations and civil society?

Q	Yes	No
The number	76	304
The ratio	20%	80%

Source: Made by the researchers based on the results of the questionnaire, 2024.

3.8. Axis (11): The Culture of Using Sustainable Transportation

Question: Which means of transportation do you use on a daily basis?

(49.74%) of the study sample use the cars as their primary mode of transportation, (27.10%) of the population prefers to walk ,citing it as one of the most sustainable public transportation methods, However, long-distance walking is not recommended. The percentage of people walking can be explained by the poor financial capabilities of the population, in addition to poverty and low standard of living, while (17.63%) of the population uses motorcycles on a daily basis, and (5.53%) of the population uses bicycles on a daily basis for transportation. We also note the lack of public buses in the study area, and there is a shortage of public transportation in the field of study.

Table 14 shows the findings of the questionnaire. Which means of transportation do you use on a daily basis?

Table 14.
Which means of transportation do you use on a daily basis?

Q	Car	Motorcycle	Bicycles	Walking on foot
The number	189	67	21	103
The ratio	49.74%	%17.63	5.53%	27.10%

Source: Made by the researchers based on the results of the questionnaire, 2024.

3.9. Axis (12): Waste

Question: Where do you put your household garbage?

Given that the type of waste collection is door-to-door, (64.74%) of the study sample put their household waste at the door of the house, which explains the lack of waste containers in the study area, forcing the population to put them at the door, while (22.37%) of the residents put their waste in the designated containers, and (12.89%) of the population put their waste away from the house, where it is dumped next to valleys, reefs, and undeveloped areas.

Table 15 shows the findings of the questionnaire. Where do you put your household trash?

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Table 15.
Where do you put your household rubbish?

Q	At the door	In waste containers	Away from the house
The number	264	85	49
The ratio	64.74%	22.37%	12.89%

Source: Made by the researchers based on the results of the questionnaire, 2024.

Question: Do you sort your household trash?

(100%) of the population of the study sample do not sort garbage into a special category for cardboard, a category for plastic, a category for glass, and a category for food and organic materials, and this explains the absence of a culture of waste sorting and the absence of environmental awareness**.**

Table 16 shows the findings of the questionnaire. Do you sort your household trash?

Table 16.
Do you sort your household trash?

Q	Yes	No
The number	0	380
The ratio	0%	100%

Source: Made by the researchers based on the results of the questionnaire, 2024.

4. Discussion Section

The study's findings show that people's level of environmental awareness is low in almost all of the responses to the survey. This research distinguishes itself from previous research in that it is more comprehensive and precise, considering variables such as gender, marital status, level of education, and the level of life of Sidi Slimane area inhabitants. The model incorporates a vital axis relating to environmental awareness and challenges, based on the responses from the participants to 34 questions.

Akpafun, et al. [16] believe that the older stakeholders in rural areas are more aware of environmental problems than younger stakeholders. Furthermore, the male gender is more aware than the female gender, and urban stakeholders are more environmentally conscious than rural stakeholders.

The researchers focus only on the gender of male or female, and age is one of the two variables that they focus on. Due to the constraints imposed by this study, cooperation among all parties involved—not just the decision-makers is essential for increasing environmental awareness.

The researchers Chandra and Babu [17] focused on the age of the individuals and their educational level, while in this research the focus was on all elements, the educational level, the cultural level, and the population's standard of living.

Taciano L and others, Milfont and Duckitt [18] identify the structure of environmental situations. The researchers have focused specifically on environmental attitudes, which are part of environmental awareness, making the research limited.

Although the research we conducted is considered comprehensive as it addressed the general public, this is the major road and basis for improving environmental consciousness. Politicians and decision-makers usually have a basic knowledge of environmental issues, particularly climate change.We selected a random sample of individuals, taking into account their age group, level of education, socioeconomic status, and quality of life, in addition to the questions. Through 34 questions addressed to the general population and 12 axes of basis, the survey ensures that the research is precise, comprehensive, and centered on environmental consciousness. As a result, all people engaged with the research can benefit from the recommendations and findings of the study, which are accurate, comprehensive, and generalizable to other study scenarios.

5. Conclusion

According to the research's findings, there is a deficiency in the general population according to study's level of environmental awareness. The main recommendation is to enhance this awareness by

including the environmental culture, environmental participation, and enjoyment of nature axes of the questionnaire in the general evaluation of population environmental awareness. The cultural axis of the environment, the culture of the axis of waste management, the axis of energy conservation, the axis of financial support, the axis of nature's dominance, the culture of adopting sustainable transportation, The axes of human dominance/growth limits, management waste, and rejection of exemption and confidence in science and technology.

Lastly, a framework that is suggested for encouraging environmental awareness is:

1. Conducting conferences, seminars, and workshops on the importance of environmental preservation and climate change is crucial to enhancing the public's understanding of environmental issues.
2. The implementation of environmental and sustainable initiatives requires financial support.
3. The feeling of enjoyment of the environment can be enhanced by organizing visits and trips to natural areas and learning about their importance. Therefore, the greater the feeling of enjoyment of the environment among residents, the greater their environmental awareness is:
4. There is a need to rationalize energy consumption, raise awareness, and educate the population.
5. Applying what is called environmental education within residential neighborhoods and cities.
6. Using sustainable and clean means of transportation, such as bicycles, walking culture, and the metro, which contribute significantly to reducing carbon emissions and enhancing culture and awareness of environmental issues among residents or individuals.
7. It is necessary to increase individuals and population's confidence in technology, as technology contributes significantly to protecting the environment and reducing climate change.
8. Promoting environmental participation among all those concerned with environmental awareness, starting with decision-makers, politicians, government agencies, non-profit organizations, the private sector, and the population.
9. Promoting a waste-recycling culture.

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Institutional Review Board Statement:
The Ethical Committee of the University of Msila, Algeria has granted approval for this study on 14 February 2023 (Ref. No. 492023).

Transparency:
The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Competing Interests:
The authors declare that they have no competing interests.

Authors' Contributions:
All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

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Appendix:

Appendix 1. Questionnaire form to measure the level of the population's awareness of environmental awareness (Sidi Slimane Neighborhood, Bousaada city).

A questionnaire form to measure the level of the population's awareness of environmental awareness (Sidi Slimane neighborhood, Bousaada city)	
Axes for measuring the level of awareness of the population of environmental awareness	Population questionnaire questions
Axis (1): Enjoying nature	Do you prefer spending the weekend in natural areas or in residential areas?
	Do you feel enjoy going to the natural areas?
	Is being in nature a great stress reducer for you?
Axis: (2) Environmental concern	Do you feel sad seeing the natural environment destroyed?
	Is random construction (Without a permit) is considered destructive to many natural areas?

Axis (3): The intention of financial support.	If you secure additional income, would you like to support the associations to carry out environmental activities? .
Axis (4): Refusal to exemption/Trust in science and technology.	Can most of the environmental problems be solved through the application of modern technologies and technology?
Axis (5): Human dominance / Limits of growth.	Do you think that humans are the main cause of damage to the environment?
Axis (6): Rationalizing energy consumption.	Do you always turn off electrical appliances and lights when you leave the house?
Axis (7): Using recycled materials	Do you use eco-friendly bags when
	grocery shopping?
Axis: (8) Environmental culture.	Have you heard about climate change?
Axis (9): Environmental responsibility.	Do you think that achieving environmental awareness requires the cooperation of the population with local authorities, associations and civil society?
Axis: (10) Environmental participation.	Do you participate in activities related to environmental protection organized by the concerned authorities?
Axis (11): The culture of using sustainable transportation.	Which means of transportation do you use on a daily basis?
	· The car.
	· The bus.
	· Motorcycles.
	· Bicycles.
	· Walking on foot.
Axis (12): Waste	Where do you put your household trash?
	· At the door of the house.
	· In containers designated for waste.
	· Far from home.
	Do you sort your household trash?

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