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## Climate Change Awareness among Egyptian Citizens: A Case Study of Ismailia Governorate

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Article Info	Abstract
<b>Article history</b> Received: 26 December 2024 Accepted: 15 February 2025 Published: 1 July 2025	<p>This study aimed to assess the prevalence of climate change awareness among a sample of citizens of the Ismailia governorate and Egypt and explore its relationship with selected demographic variables. The research sample consisted of 861 participants (both males and females) aged between 12 and 75 years, with a mean age of 21.39 years and a standard deviation of 7.34 years. Climate change awareness was measured using a set of declarative statements which has an accepted reliability and validity. The findings revealed that 3.2% of the participants demonstrated no awareness of climate change, 23.6% exhibited low awareness, and 73.1% reported moderate to high levels of climate change awareness. Additionally, 78% of the sample believed that Egypt is not significantly vulnerable to the negative impacts of climate change, while 91.3% considered climate change a global issue warranting attention. The results showed no relationship between awareness of climate change and age, gender, place of residence, and educational level. The study recommended organizing seminars to enhance Egyptian climate change awareness and promote sustainable behaviors to mitigate its adverse effects.</p>
<b>Keywords</b> Climate Change Awareness, Adolescents and Adults, Egyptian Society	
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## Introduction

Climate change stands as one of the most urgent global challenges today, primarily due to its far-reaching impacts on human health and the ecosystems on which we rely. It encompasses a wide range of environmental disruptions, including rising global temperatures, floods, droughts, storms, and other extreme weather events, all of which have severe consequences. These changes are driven by long-term shifts in climate patterns, which are often influenced by human activity, either directly or indirectly. Research by Cook et al. (2016) reveals that 97% of scientists agree that human actions are the main contributors to climate change, triggering substantial alterations in climate and weather conditions over extended periods.

The significance of studying climate change has increased across various fields, particularly environmental psychology, in response to the growing recognition of its harmful effects in the 21st century. The critical first step in addressing climate change is to assess individuals' awareness of the issue, including its causes, impacts, and potential solutions. Raising awareness can drive individuals to adopt sustainable behaviors, thus mitigating climate change's adverse effects. According to Alvi et al. (2020), educational programs and workshops have been shown to produce lasting, positive changes in how people respond to climate change, enhancing their understanding and capacity to act.

Despite this, climate change awareness remains insufficient, particularly in developing countries, both on governmental and individual levels. The effects of climate change are especially severe in these regions, with Africa being notably vulnerable. Lee et al. (2015) suggest that awareness is generally higher in developed countries, where climate change is often a higher priority, compared to developing countries, where it is frequently overlooked. Educational institutions play a crucial role in bridging this gap by providing knowledge and skills to help individuals develop solutions. Awareness of climate change is essential for fostering resilience and adaptation, as predicted by the Theory of Planned Behavior, which asserts that people's actions are guided by their understanding of an issue and its implications.

Egypt, a developing country, is particularly at risk from climate change due to extreme temperatures, including scorching summers and harsh winters. The Egyptian government has initiated substantial efforts to raise awareness about climate change through various channels. Notably, climate change topics are now integrated into educational curricula at all levels, from

primary school to university (Ead et al., 2022). Furthermore, Egypt has hosted significant international climate-related conferences, including the United Nations Climate Conference in Sharm El-Sheikh. Climate change remains one of the most pressing existential threats, yet perceptions of global warming risks differ widely across populations.

This study is particularly relevant as it aims to evaluate the prevalence of climate change awareness and explore its relationship with demographic variables such as gender, age, and educational background. This research contributes to the emerging body of knowledge on climate change awareness in Egypt, a topic that has gained prominence in the context of Egypt's climate conferences and its 2030 Agenda for Sustainable Development. The study focuses on students in several stages of education with ages ranging from 12 to 72 years old (The higher scores on the age variable refer to the post-graduated and under-graduated students in the university, a diverse demographic group) with two primary objectives:

1. To assess the level of awareness for the sample in Egyptian society regarding climate change and their perceptions of the current climate crisis, as well as their readiness to engage in environmentally sustainable behaviors to alleviate its effects.
2. To encourage educational institutions and environmental organizations to prioritize initiatives such as workshops and seminars aimed at increasing university students' awareness of climate change.

## *Theoretical Framework and Review of Related Studies*

### **Studies in African Societies**

In Nigeria, Agboola & Emmanuel (2016) conducted a study among university students and found a high level of climate change awareness. Their results showed that 97% of the participants believed in the occurrence of climate change, and 78.2% attributed it to human activities. However, gender differences in climate change awareness were not statistically significant. Similarly, Olaniyi (2020) reported that 95% of adult students in Niger acknowledged climate change, recognizing human activities as the main cause. In Kenya, Ajuang et al. (2016) surveyed 11 regions and found that 90.9% of respondents observed changes in weather patterns. Using a generalized linear model, they identified the significant effects of gender, educational level, and age on climate change awareness.

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### Studies in Asian Societies

In Oman, Al-Buloshi & Ramadan (2015) found moderately high levels of climate change awareness in a sample from six states, despite limited knowledge regarding its causes and prevention. In China, a national study by Wang et al. (2017) found that 92.7% of the sample had limited knowledge of climate change, while 7.1% had never heard of it. Despite this, 94.4% believed in the occurrence of climate change, with 66% attributing it to human activities. In the Philippines, Magulod (2018) reported high levels of awareness among university students regarding climate change's causes, occurrence, and negative impacts. Gender differences were statistically significant, with females demonstrating higher awareness levels. In Malaysia, Liwan et al. (2022) found that 70% of respondents were aware of climate change but had limited knowledge of green products and government policies. Additionally, 52.33% identified the increased use of natural resources as a major contributor. In Pakistan, Mohsin et al. (2022) surveyed university students in Lahore, finding that 72.3% had heard of climate change and 79.5% believed it affected their lives, with overall awareness levels being moderate.

### Studies in European Societies

A survey conducted across 22 European countries by Poortinga et al. (2019) found that most Europeans believed in climate change and attributed it to human activities. However, they perceived its negative impacts as limited and expressed moderate concern. Gender differences were evident, with males showing less concern but higher recognition of negative impacts compared to females, particularly in Northern Europe. Older individuals tended to perceive limited impacts and expressed less concern than younger individuals. Educational attainment was positively associated with awareness and recognition of climate change impacts, though this relationship was statistically insignificant in some countries. Cultural values, such as conservatism versus openness to change, were generally non-significant predictors of awareness but showed positive or negative associations in specific countries. In Turkey's Bilecik Province, Turkmen (2021) found that 96% of respondents believed in the occurrence of climate change, 87% viewed it as a threat to human life, and 83% attributed it to increased vehicle emissions.

### Studies in Egyptian Society

In a survey conducted by the European Investment Bank (2023) across ten Middle Eastern countries, including Egypt, 92% of the Egyptian sample reported that climate change

affected their daily lives. Salem et al. (2022) found that 71.1% of adults aged 18 and above were aware of global warming, 48.2% recognized its impacts, and 78.3% attributed it to human activities such as emissions from vehicles and factories. Ghanem (2023) studied university students and found that 88.3% were aware of climate change, 84% attributed it to human activities, and 30% believed Egypt was affected by the phenomenon.

Despite the extensive literature on climate change awareness across African, Asian, and European societies, several key gaps remain. Most existing studies have primarily focused on general adult populations or university students, often using broad national or regional samples. While these studies have shed light on levels of awareness, causes, and perceived impacts of climate change, few have specifically examined the awareness of climate change culture—particularly within the context of teacher students in Faculties of Education. Moreover, although some studies have explored demographic factors such as gender, age, and education level, there remains a lack of in-depth, context-specific analysis within the Egyptian academic setting, especially among future educators who play a pivotal role in shaping environmental awareness in future generations. The present study addresses these gaps by focusing on teacher-students at Suez Canal University, aiming to evaluate their awareness of climate change culture through an analytical lens. This research not only contributes to the limited body of knowledge on climate literacy among pre-service teachers in Egypt but also offers insights that can inform educational strategies and policy development in the realm of environmental education.

### ***Problem Statement***

Climate change is a pressing global issue that affects various aspects of human life, yet public awareness and engagement with climate-related phenomena vary significantly across populations. While climate change awareness has increased worldwide due to media exposure and educational campaigns, a gap persists between recognizing climate change as a global concern and perceiving it as a direct, local threat. In Egypt, despite widespread acknowledgment of climate change, many individuals do not believe the country is significantly affected, and active participation in climate-related initiatives remains low.

Psychological factors, such as cognitive biases (e.g., optimism bias, availability heuristic, and cognitive dissonance), may contribute to this discrepancy, preventing individuals from translating awareness into action. Moreover, demographic variables, including gender,

age, place of residence, and educational level, do not appear to significantly influence climate change awareness, suggesting that broader societal and occupational factors may play a more pivotal role (Al-Buloshi & Ramadan, 2015; Ghanem, 2023). Given these findings, it is essential to examine the psychological and contextual factors shaping climate change awareness in Egypt and to explore strategies for bridging the gap between awareness and proactive engagement. The study verifies the answer to these questions:

1. To what extent are individuals in Egypt aware of climate change?
2. Have you personally, as a one-item index, been affected by climate change phenomena?
3. Is there a relationship between awareness of climate change and some demographic variables (gender, age, place of residence, and educational level)?

## **Methodology**

### ***Research Design***

The study utilized a descriptive survey design to collect data on climate change awareness from participants. An electronic survey link was distributed to a sample of Egyptian society through popular social media platforms, including WhatsApp, Facebook, and Telegram groups, to facilitate broad participation. This method allowed for efficient data collection from a diverse demographic, ensuring a comprehensive understanding of climate change awareness within the population.

### ***Participants:***

The electronic survey link was distributed to both undergraduate and postgraduate students at the faculty of Education at Suez Canal University through WhatsApp groups in collaboration with faculty members. Additionally, the link was shared with middle and high school students in Ismailia Governorate through their teachers and also disseminated to other groups via WhatsApp and Facebook. The sampling technique used was snowball sampling, which does not ensure randomness. The research sample consisted of 861 participants (both males and females), aged between 12 and 75 years, with a mean age of 21.39 years and a standard deviation of 7.34 years. The demographic distribution of the sample is summarized in Table 1.

**Table 1***Distribution of Study Sample by Demographic Variables (N = 861)*

<b>Variables</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Gender</b>		
Male	181	21%
Female	682	79%
<b>Place of Residence</b>		
Urban	563	65.2%
Rural	300	34.8%
<b>Educational Level</b>		
Pre-University	154	17.8%
University	709	82.2%
<b>Occupation</b>		
Student	675	78.4%
Middle-level Jobs	70	8.1%
High-level Jobs	78	9.1%
Unemployed	38	4.4%
<b>Total Sample</b>	861	100%

This demographic breakdown highlights the diversity of the sample, which includes participants from different educational levels, places of residence, and occupations. However, it is non-random due to the snowball sampling approach.

### ***Data Collection***

Data were collected for the designed form of author Climate Change Awareness using the following items: Please indicate your response and awareness of the phenomenon of climate change, which includes unusual events such as rising temperatures, earthquakes, floods, storms, and extreme cold in winter, among others:

**1. To what extent are you aware of climate change?**

- Not aware at all (0)
- Slightly aware (1)
- Moderately aware (2)
- Highly aware (3)

2. **Do you believe that climate change is a global issue worthy of attention?**
  - Yes (1)
  - No (0)
3. **Do you think Egypt is affected by climate change?**
  - Yes (1)
  - No (0)
4. **Have you participated in seminars, conferences, or courses on climate change?**
  - Yes (1)
  - No (0)
5. **Have you personally been affected by climate change phenomena?**
  - Yes (2)
  - Somewhat (1)
  - No (0)

The scale validity as AVE index was .765, and the reliability by Cronbach's alpha is .77. In addition, demographic variables such as age, gender, occupation, and educational level were collected.

### ***Procedures:***

The study's measurement scale, along with demographic data, were administered through a Google Forms link. This link was distributed via WhatsApp groups for students at the Faculty of Education at Suez Canal University and Suez University, as well as through WhatsApp groups for schools on Facebook. Data collection occurred from March 2023 to mid-May 2023. Participants were given the option to remain anonymous, enhancing psychological comfort and encouraging honest responses. They were informed that their data would remain confidential and would only be used for research purposes, with their identities excluded from the study's results. This approach was in line with the ethical principles outlined in the Helsinki Declaration on research ethics. After completing the data collection process, the dataset was exported from XLSX format to IBM SPSS Version 29, and demographic variables were coded for analysis.



## Results

### *Awareness of Climate Change*

The frequencies and percentages of responses to the question "To what extent are you aware of climate change?" were calculated as follows:

**Table 2**

*Levels of Climate Change Awareness Among a Sample of the Egyptian Population*

Response	Frequency	Percentage
Not aware at all	28	3.2%
Slightly aware	204	23.6%
Moderately aware	521	60.4%
Highly aware	110	12.7%

Table 2 reveals that 3.2% of participants reported no awareness of climate change, while 23.6% exhibited slight awareness. In contrast, 73.1% demonstrated moderate to high levels of awareness.

These findings offer valuable psychological insights into climate change awareness among the Egyptian population. The relatively small percentage (3.2%) of individuals with no awareness suggests that climate change has become a widely recognized issue, likely driven by education, media, and global discourse. This indicates that climate change has entered the public consciousness. However, the 23.6% with only slight awareness highlights that a significant portion of the population still holds a superficial understanding of the issue. From a cognitive psychology perspective, this could stem from limited access to or engagement with more detailed, context-specific information on climate change. It may also reflect the availability heuristic, where individuals assess the importance of climate change based on the frequency or vividness of their encounters with climate-related events, which may be rare or less directly impactful.

Conversely, the 73.1% of participants exhibiting moderate to high levels of awareness reflects a broader societal recognition of climate change's tangible effects. This aligns with social learning theory, which suggests that awareness and attitudes are shaped by observing community behaviors and media portrayals. The higher levels of awareness may also indicate

the success of public awareness campaigns that have effectively framed climate change as both urgent and personally relevant.

However, the psychological phenomenon of cognitive dissonance may be at play. While individuals acknowledge the significance of climate change, they may experience internal conflict when considering their actions or inactions in addressing the issue. This dissonance could create a psychological barrier to translating awareness into action. These findings highlight the need for interventions that not only raise awareness but also address underlying psychological factors, such as perceived helplessness or low self-efficacy, which may prevent individuals from taking meaningful action. Tailored strategies are essential to bridge the gap between awareness and concrete behavioral change.

**To what extent is awareness of climate change phenomena prevalent?** Frequencies and percentages were calculated as follows:

**Table 3**

*Awareness of Climate Change Phenomena among a Sample of the Egyptian Population.*

Questions related to climate change phenomena	Yes	No
	N	%
Do you believe that Egypt is affected by climate change?	673	22
Do you think climate change is a significant issue that deserves global attention?	788	91.3
Have you participated in seminars, conferences, or workshops on climate change?	157	18.2

The findings regarding Egypt's perceived vulnerability to climate change reveal that the majority of participants (78%) do not believe Egypt is significantly impacted by its adverse effects. However, 91.3% acknowledge climate change as a global issue that warrants attention. Furthermore, only 18.2% of participants reported engaging in activities such as seminars, conferences, or workshops related to climate change.

From a psychological perspective, these results highlight a clear disconnect between awareness and active engagement with climate change among the sample population. While an overwhelming majority (91.3%) recognize climate change as a global concern, a significant proportion (78%) do not perceive Egypt as directly affected. This discrepancy reflects a common psychological phenomenon known as "local vs. global thinking," in which individuals acknowledge broader issues but struggle to relate them to their immediate environment. This disconnect may be due to limited localized information or a perception of distance from the

issue, fostering a sense of detachment. Additionally, cognitive biases such as the optimism bias" may contribute, as individuals often believe that negative global events will not affect them personally, leading to complacency. As a result, people may feel less urgency to take personal or collective action against climate change despite understanding its global impact.

The low participation rate (18.2%) in climate change-related seminars, conferences, or workshops further underscores the gap between awareness and proactive engagement. This phenomenon can be explained through the "intention-behavior gap," a psychological concept that describes the tendency for people to fail in translating their intentions or beliefs into action due to barriers such as lack of motivation, time, or perceived efficacy. Even though most participants recognize the importance of climate change, their limited participation may stem from feelings of helplessness or apathy, where they perceive their efforts as insufficient to make a meaningful difference. This effect can also be compounded by the "bystander effect," where individuals assume that others will take responsibility, leading to a diffusion of accountability. These psychological insights highlight the need for interventions that not only raise awareness but also encourage active participation by addressing local relevance, perceived efficacy, and collective responsibility to bridge the gap between recognition and meaningful engagement in climate change efforts.

**Have you personally been affected by climate change phenomena?** The frequencies and percentages were estimated as follows:

**Table 4**

*Personal Impact and Percentages of Climate Change Effects on Sample Members*

Responses	Number	Percentage
No	126	14.6%
To some extent	426	49.7%
Yes	309	35.7%

The phrase "to some extent" was intentionally used to reflect a spectrum of awareness and perceived impact, as reported by the participants, rather than an absolute or binary measure. This approach acknowledges the variability in individuals' experiences and perceptions of climate change, recognizing that awareness and psychological impact exist on a continuum. Such gradation is crucial in capturing the nuanced ways in which individuals interpret and

respond to climate-related issues, aligning with existing psychological frameworks on environmental perception and climate anxiety.

From a psychological perspective, the data in Table 4 reveals the significant personal impact that climate change has had on the individuals in the sample. The fact that 85.4% of participants reported experiencing some level of personal impact suggests widespread recognition of climate change's tangible effects on daily life. This personal experience may contribute to increased levels of anxiety, stress, and even helplessness, as individuals perceive their environment as becoming more unpredictable and hostile.

The 49.7% of respondents who reported being affected "to some extent" suggest that while they acknowledge the changes, they may not fully understand or feel empowered to address the issue. This lack of clarity and control can lead to feelings of ambivalence or frustration. In contrast, the 14.6% who reported no personal impact may reflect either a lack of awareness or psychological distancing, potentially serving as a defense mechanism to cope with the overwhelming nature of climate change. This detachment could allow individuals to avoid confronting the emotional weight of the issue.

This distribution of responses underscores the need for targeted psychological support and education. Such interventions could help individuals better understand the changes occurring in their environment and develop coping strategies to manage the emotional challenges posed by climate change. By addressing both the cognitive and emotional dimensions of this issue, interventions can empower individuals to take more informed, proactive steps in response to the ongoing environmental crisis.

**Is there a relationship between awareness of climate change and some demographic variables (gender, age, place of residence, and educational level)?** A Chi-square statistic was calculated for this analysis. The researcher considered age as a categorical variable, dividing it into two groups: under 20 years (coded as 0) and over 20 years (coded as 1). The results are as follows:

**Table 5**

*The relationship between awareness of climate change and some demographic variables.*

Variable	X <sup>2</sup> Statistic	df	P-value
Awareness * Gender	1.431	2	.489
Awareness * Age	4.222	2	.121
Awareness * Place of Residence	.380	2	.827
Awareness * Educational Level	4.888	2	.087

Table 5 reveals no significant relationship between awareness of climate change and demographic factors such as age, gender, place of residence, or educational level. However, it does suggest a relationship between awareness of climate change and employment status.

From a psychological perspective, the findings indicate no significant differences in climate change awareness across demographic groups, as evidenced by the p-values exceeding the conventional significance threshold of 0.05. This may suggest that awareness of climate change is more likely shaped by broader socio-cultural, media, or environmental factors than by individual characteristics. For example, people across various age groups or educational levels might be exposed to similar sources of information about climate change, leading to comparable levels of awareness. Additionally, the lack of association with gender and place of residence implies that climate change awareness could be driven more by societal-level information dissemination and global discourse than by personal traits.

On the other hand, the significant relationship between awareness and employment can be understood from a psychological viewpoint as an indicator that individuals in certain professional fields are more likely to encounter climate-related issues, either due to their job requirements or the nature of their work. For example, individuals working in environmental, scientific, or policy-related roles may be more frequently exposed to discussions and research on climate change, thereby increasing their awareness compared to individuals in other sectors. This suggests that one's professional context can play a pivotal role in shaping environmental awareness. Consequently, the finding emphasizes the need for targeted education and training on climate change within specific occupational sectors to enhance awareness and foster a more informed workforce.

## **Discussion:**

The findings of this study, which assesses climate change awareness among a sample of citizens of Ismailia governorate, Egypt, contribute to the expanding body of literature on this topic, particularly in developing countries. Consistent with other research conducted in similar contexts, the results indicate that while there is some awareness of climate change, significant gaps persist in terms of deeper understanding and proactive engagement. Previous studies, such as those by Lee et al. (2015), have shown that climate change awareness is generally higher in developed countries, where the issue has received more sustained attention. In contrast, developing countries like Egypt, while highly vulnerable to the impacts of climate

change, have historically been less engaged in the climate change discourse. This vulnerability, exacerbated by challenges like extreme temperatures and water scarcity, underscores the urgency of increasing awareness in such contexts.

The Egyptian government has made efforts to address this issue through educational reforms and climate-focused conferences, such as COP27 in Sharm El-Sheikh. However, the current study reveals that awareness levels remain uneven, particularly across various demographic groups. These findings align with international studies from African and Asian societies, where climate change awareness is notably influenced by access to education and exposure to environmental events. In countries such as Nigeria and Kenya, for example, higher levels of awareness were linked to both educational attainment and the perception of local climate change impacts (Agboola & Emmanuel, 2016; Ajuang et al., 2016).

Despite these efforts, significant barriers remain. In Egypt, as reflected in the study's results, the recognition of climate change as a global issue does not always translate into personal engagement or a deeper understanding of its causes and potential solutions. This discrepancy highlights the need for a more comprehensive and targeted educational approach—one that not only informs but also empowers individuals to take action. According to the Theory of Planned Behavior, behavior change is more likely when individuals fully comprehend the consequences of their actions. Therefore, educational institutions and environmental organizations must prioritize the integration of climate change topics into curricula and organize events that encourage deeper engagement with the issue. By doing so, they can help cultivate a generation of students who are not only aware of climate change but are also equipped with the necessary skills to contribute to sustainable solutions.

## Conclusion

This study offers valuable insights into the awareness of climate change among Egyptian university students, revealing varying levels of awareness across different demographic groups. While a significant portion of participants recognized the importance of climate change and acknowledged its global implications, personal engagement with the issue and a deeper understanding of its causes and consequences were relatively limited. The findings suggest that despite efforts by the Egyptian government to raise awareness—such as integrating climate change topics into educational curricula and organizing climate-related events like COP27—there remains a substantial gap in practical engagement among the population.

Notably, the study emphasizes that while awareness of climate change is crucial, it must be accompanied by active participation and the cultivation of sustainable behaviors to mitigate its impacts. This research contributes to the broader discourse on climate change awareness in developing countries and highlights the urgency of prioritizing climate education in the region.

### ***Limitations***

While this study provides valuable insights, it is not without its limitations. First, the reliance on self-reported data may introduce social desirability bias or inaccuracies, particularly regarding participants' engagement in climate change-related activities. Additionally, the cross-sectional design captures only a snapshot of awareness at a specific point in time without accounting for potential changes over time or the influence of recent climate-related events or educational interventions. Finally, while the study examined the relationship between awareness and demographic factors, it did not explore the underlying psychological factors that may influence climate change perceptions and behaviors. Future research could delve deeper into these psychological drivers to gain a more comprehensive understanding of the motivations behind climate change awareness and engagement.

### ***Implications***

The study's findings carry significant implications for policy, education, and future research. First, they highlight the need for educational institutions to take a more proactive approach to addressing climate change, treating it not just as an academic topic but as an urgent, real-world issue. Universities and schools should incorporate more comprehensive climate change education into their curricula and offer specialized workshops, seminars, and outreach programs to enhance awareness and encourage environmentally responsible behaviors among students.

Second, the findings underscore the importance of using demographic data—such as gender, age, and educational level—to tailor climate change education strategies more effectively. As seen in international studies, targeted campaigns that consider these variables are more likely to succeed in raising awareness and fostering greater engagement.

Finally, this research stresses the need for stronger collaborations between governments, educational institutions, and environmental organizations to bridge the gap

between awareness and action, as indicated in Alharbi et al. (2024). By working together, these entities can ensure that climate change education translates into meaningful, collective efforts to address the issue.

### Recommendations and Suggested Studies:

To enhance climate change awareness among the Egyptian population, it is essential to integrate climate education into school and university curricula, launch targeted media and social media campaigns, and conduct community-based workshops, particularly in rural and high-risk areas. Additionally, engaging influential figures such as religious leaders, educators, and social influencers can help embed climate awareness into societal discourse. Workplace initiatives should also be encouraged, promoting sustainability programs and employee training on eco-friendly practices. Furthermore, strengthening partnerships with NGOs and government entities can facilitate large-scale awareness initiatives and policy-driven educational interventions. Future research should assess the effectiveness of these mechanisms in promoting climate awareness and fostering sustainable behaviors.

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## الوعي بالتغير المناخي بين المواطنين المصريين: دراسة حالة على محافظة الإسماعيلية

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### ملخص البحث

هدفت هذه الدراسة إلى تقييم مدى انتشار الوعي بالتغير المناخي بين عينة من مواطني محافظة الإسماعيلية وجمهورية مصر العربية، واستكشاف علاقته ببعض المتغيرات الديموغرافية لعينة الدراسة. وتكونت العينة من 861 مشاركًا من الذكور والإناث ممن تراوحت أعمارهم بين 12 و75 عامًا، بمتوسط عمري بلغ 21.39 سنة، وانحراف معياري قدره 7.34. وتم قياس الوعي بالتغير المناخي من خلال مجموعة من العبارات الصريحة المرتبطة بمظاهر سلوكية تتعلق بالظاهرة. أظهرت النتائج أن 3.2% من المشاركين لم يكن لديهم أي وعي بالتغير المناخي، وأن 23.6% أبدوا درجة وعي منخفض، بينما أظهر آخرون بلغ نسبتهم 73.1% ذوي وعي متوسط إلى مرتفع بالتغير المناخي. كما بينت الدراسة أن 78% من أفراد العينة كانت اعتقاداتهم المبررة بأن مصر ليست معرضة بشكل كبير لتأثيرات التغير المناخي، في حين رأى 91.3% أن التغير المناخي قضية عالمية تستحق الاهتمام. وكشفت النتائج عدم وجود علاقة دالة إحصائية بين وعي التغير المناخي وكل من العمر، والنوع، ومكان الإقامة، والمستوى التعليمي. وأوصت الدراسة بضرورة تنظيم ندوات توعوية لتعزيز الوعي المجتمعي بالتغير المناخي لدى المواطنين المصريين، وتشجيع السلوكيات المستدامة للحد من آثاره السلبية.

**الكلمات المفتاحية:** الوعي بالتغير المناخي؛ المراهقون والبالغون؛ المجتمع المصري.