



## Willingness to pay for the welfare of stray companion animals in Greece

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### Abstract

This article is a contingent valuation study that investigates the willingness to pay for the welfare of stray dogs and cats in Greece managed by municipalities. The main research question was whether individuals would be willing to pay and how much to support their municipalities in managing stray animals. An online survey collected responses from across Greece. After analyzing the data, certain sociodemographic characteristics of the respondents were identified. Most respondents are urban residents who are highly concerned about the issue of stray companion animals in the country. Using Stata 14, a contingent valuation model showed that 63% of participants (250 individuals) are willing to contribute financially. Key factors influencing this willingness include the respondents' age, donation history, and consideration of adopting an animal in the future. The average amount participants are willing to pay is €9.18.

**Key words:** Willingness to pay; stray companion animals; animal welfare; Greece

## Disposición a pagar por el bienestar de los animales de compañía callejeros en Grecia

**Resumen.** Este artículo es un estudio de valoración contingente que investigará la disposición a pagar por el bienestar animal de los perros y gatos callejeros en Grecia gestionados por los municipios. La pregunta para este estudio fue si las personas estarían dispuestas a pagar y cuánto apoyar a sus municipios en la gestión. Una encuesta en línea recogió respuestas de toda Grecia. Después de analizar los datos, se identificaron ciertas características sociodemográficas de los encuestados. La mayoría de los encuestados son urbanistas que están muy preocupados por el problema de los animales de compañía callejeros del país. Utilizando Stata 14, un modelo de valoración contingente mostró que el 63% de los participantes (250 personas) están dispuestos a contribuir económicamente. Los factores clave que influyen en esta disposición a apoyar económicamente incluyen la edad de los encuestados, el historial de donaciones y su consideración de adoptar un animal en el futuro. La cantidad media que los participantes están dispuestos a pagar es de 9,18 euros.

**Palabras clave:** Disposición a pagar, animales de compañía callejeros, bienestar animal, Grecia.

### INTRODUCTION

Owning a pet or simply being around a companion animal is linked to numerous health benefits, including enhancements in mental, social, and physiological well-being (Friedmann and Son 2009). However, millions of companion animals are homeless all over the world. It is estimated that over 75% of dogs worldwide are stray dogs

(Papavasili et al. 2023). The main reasons for the presence of stray animals are frequently attributed to economic difficulties, lifestyle changes, or shifts in priorities (Toronto Humane Society 2024). The overpopulation of stray companion animals is also substantially attributed to “irresponsible pet ownership”, which often results in the abandonment of companion animals, typically without prior neutering, and the unchecked breeding of stray animals (Papavasili et al. 2023). It has been shown that pet

owners encounter various challenges in achieving positive welfare outcomes for their companion animals, which can be affected by both socioeconomic and environmental factors (McDowall et al. 2023). Additionally, it could be claimed that one reason may be culture and tradition. In the case of Mexico, the dog-human relationship was traumatized after the European invasion and the use of dogs in military combat (Sandoval-Cervantes 2016). The Spanish conquest introduced European dog breeds to the Americas, which contributed to the continuing existence of street dogs within urban environments, forming an iconic and lasting image of dogs roaming city streets (Sandoval-Cervantes 2016). Furthermore, another reason companion animals become strays or are surrendered to shelters are behavioral problems (Verga and Michelazzi 2009). This may be exacerbated by the fact that animals housed in rescue shelters are unable to exhibit their full range of natural behaviors and often display signs of behavioral and physiological distress (Verga and Michelazzi 2009).

The problem of stray companion animals represents a societal challenge that necessitates coordinated and collective efforts for its resolution. Governments and international bodies, such as the European Union, have enacted legislation designed to address this issue and promote animal welfare in general. Animal welfare encompasses more than just preventing cruelty or unnecessary pain and suffering (Bousfield and Brown 2010). It involves ensuring an animal's physical and mental well-being, as well as addressing its ability to fulfill its natural needs and desires (Bousfield and Brown 2010). A recent study in Jordan supported that empathy serves as a shared language between animal welfare and human welfare (McClellan 2019). Sometimes it has been indicated that anthropomorphism and subjectivity can obscure humans' ability to make accurate judgments about the welfare of companion animals, even when confronted with clear and apparent signs of pain and suffering (Serpell 2019). When evaluating the benefits of legislation, it is important to gather scientific evidence on the policy's impact on animal welfare; as well as to understand the degree to which society desires the policy and the benefits, they believe it will bring (Bennett 1996).

The foundation of animal welfare legislation is rooted in people's willingness to pay (Zhao and Wu 2011). However, evidence is scarce regarding humans' willingness to pay for improvements in the quality of life for other species (Vander Naald et al. 2011). One of the few studies available revealed that respondents from Victoria, Australia were willing to pay for measures aimed at enhancing the control and protection of companion animals (Lescun 1990). They expressed greater concern about cruelty to companion animals compared to other significant issues, such as protecting native forests and animals (Lescun 1990). In the UK a study demonstrated that people were willing to pay to enhance animal welfare conditions for stray dogs and seem to support the implementation of welfare-enhancing measures like dog licensing and mandatory microchipping (Sietto 2015). Moreover, according to Chinese research on willingness to pay for animal welfare, elements like age, education and income were significantly important whereas gender and occupation were not as

much (Zhao and Wu 2011). Similarly, an Australian survey regarding farm animal welfare revealed that the elements that influenced respondents' willingness to pay were their self-assessed knowledge and concern of animal welfare (Taylor and Signal 2009).

Research spanning nine countries revealed that the personal value of concern for animal welfare is a unique and a reliable indicator of charitable donations across diverse cultures (Sneddon et al. 2021). This indicates that individuals with a strong sense of compassion for animals are more inclined to support animal-related charities financially (Sneddon et al. 2021). Furthermore, higher income and educational level are generally associated with higher donation rates, and there is evidence that women and younger people have a stronger predisposition to donate (Faunalytics 2018). Similarly, according to Loubière et al. (2020), a contingent valuation study on European citizens' willingness to pay programs that aimed at ending human homelessness revealed that participants with higher socioeconomic status, such as those with higher educational levels and those who pay income taxes, were more likely to be willing to pay to end homelessness. Finally, when people are better informed about the problems and provided with information on animal welfare standards, public concern for animal welfare may rise (Clark et al. 2017).

A study by the Aristotle University of Thessaloniki revealed that the population of stray dogs and cats in Greece surpasses three million and is projected to approach four million in the next few years (Newsbeast 2023). In 2021, Greece voted a new law (Law 4830/2021) that regulates the relationship with companion animals and introduces a stray management program led by municipalities and local animal welfare organizations. The foundational framework for pet ownership regulations, management of stray companion animals, and the mandatory microchipping of pets in Greece was established under Law 4039/2012, with updates introduced through Law 4235/2015 (Filippas et al. 2024). These legislative measures were instrumental in addressing issues related to animal welfare, promoting accountability among pet owners, and ensuring a systematic approach to managing stray animal populations (Filippas et al. 2024). Law 4830/2021, which introduces extensive measures under the Project Argos framework, is a major improvement in animal welfare legislation (Greek Reporter 2021). To prevent overpopulation and decrease the number of strays, the law requires mandatory sterilization for both owned and stray companion animals (Greek Reporter 2021). The National Animal Registry (NAR), a digital system that registers pet ownership, medical information, and sterilization status to improve accountability and transparency, is an innovative approach (Greek Reporter 2021). Additionally, the law punishes animal mistreatment, neglect, and cruelty severely, including clauses that designate extreme circumstances as crimes. Municipalities must also ensure humane handling and control of stray animals by providing suitable shelters and care (Greek Reporter 2021). Within this law, the central government has allocated a set budget for all municipalities to deal with the stray companion animal issue in their jurisdiction (Kede 2021). However, this is a one-off contribution, and municipalities are tasked with the responsibility of financing

the stray companion animal management program.

The main objective of the present study is to explore Greek citizens' willingness to pay for stray companion animal welfare and analyze key influencing factors. Our aim is to estimate the amount of money people are willing to donate to support municipal effort in successfully managing Greece's stray dog management and their welfare. To the best of our knowledge, this topic has never been previously examined in the context of Greece.

## MATERIALS AND METHODS

**Sample.** To investigate the willingness to pay for the management and welfare of stray companion animals in Greece, an online survey was conducted nationwide from March to September 2023. According to the 2021 Population and Housing Census conducted by the Hellenic Statistical Authority (ELSTAT), Greece's total resident population was 10,432,481. Of this, 8,900,000 individuals were aged 18 and over, accounting for approximately 85.3% of the population (ELSTAT 2021). Adult participants aged 18 and above, were randomly recruited through social media posts. According to the Hellenic Statistical Authority (ELSTAT), in 2019, 84.6% of individuals aged 16 to 74 in Greece are internet users, and 73.5% of them are active in social networks (ELSTAT 2019). The method of finding participants through social media posts enabled this research to reach large and diverse populations efficiently, which is critical for contingent valuation studies. Social media recruitment has been shown to be effective in gathering data from wide-ranging demographics for public health and social science research (Thornton et al. 2016).

An ethical approval for this study was obtained by the Harokopeion University in Greece (No. 99037/14.03.2022), and the recruitment of participants was undertaken based on standard practices such as participants were informed about the study's purpose, the planned use of the data, and were assured of their anonymity in accordance with GDPR EU Regulation.

The sample size of the study for studying the willingness to pay among Greece's adult population was 395. The sample size is statistically sufficient to represent Greece's adult population of 8,900,000, as it aligns with established practices in sampling for large populations. Using the standard formula for sample size determination:

$$n = Z^2 p(1p) / e^2$$

where Z is the Z-score for a 95% confidence level (1.96), p is the proportion of the population with the characteristic (assumed to be 0.5 for maximum variability), and e is the margin of error (0.05), the required sample size is approximately 384. Hence, this sample of 395 respondents exceeded the minimum threshold needed for robust statistical reliability. Additionally, when the population size is over 100,000, the influence of population size on sample size diminishes, and a sample size of this magnitude is considered sufficient for valid inference (ELSTAT 2019). Furthermore, similar studies in other contexts, such as contingent valuation research in Europe, have successfully

utilized comparable sample sizes to capture public opinion, confirming the adequacy of this approach (Loubière et al. 2020, Sneddon et al. 2021).

**Survey design.** The contingent valuation (CV) method was employed to design the survey and to estimate the value that respondents were willing to pay to safeguard stray companion animal welfare. This method has been widely used in the area of willingness to pay studies such as Bennett (1996), who employed the contingent valuation method to financially estimate the perceived benefits of specific measures designed to improve farm animal welfare.

The questionnaire was designed into three sections. The contingent valuation scenario was placed after the demographic and general knowledge and awareness of strays in Greece questions. The last section explained the companion animals' management national legislation (Greek Law 4830/2021). The respondents were asked closed ended, "yes" or "no" questions, on their awareness of the elements and obligations of the law regarding stray companion animals. The method to estimate the willingness to pay was the standard iterative bidding process. A passage explained the hypothetical scenario of whether the respondents were willing to contribute an amount of money per month to help the local government with stray companion animals' management programs. It was suggested to be paid through the electricity or municipality bills. The iterative bidding process consisted of five "yes" or "no" questions. The initial question was whether they were willing in general to help, if the respondents answered "no" then they were taken to a question where they had the opportunity to explain why they would not. This question established for us the zero willingness to pay value since the respondent was not taking part in the bidding process. Those who answered "yes" were asked if they were willing to pay the highest amount of money of 13 Euros per month or more. If they responded "no" we proposed smaller amounts, down to 1-3 Euros per month.

## RESULTS

**Sociodemographic characteristics of the sample size.** According to our results, 74% of respondents were women and almost 95% reside in urban areas. The majority of the respondents hold a university degree (bachelor's degree or master's degree, 58.51%). The majority of the respondents are in the age group of 35-44 years of age followed by age group 45-54. More details can be found in Tables 1.

The monthly income of the respondents varied, with more than half of them (56.59%) ranging from €600 to €1,800 (Table 2). In the question asking if they have noticed stray companion animals in their residential area, 90% of the respondents indicated that they had noticed stray animals, with 39% of them indicating that they were extremely concerned and 31% very much concerned of the issue (Table 3).

**Table 1.** Sociodemographic characteristics

Male	102	25.95%
Female	293	74.34%
Other	0	0%
Urban	376	95.19%
Rural	19	4.81%
Education Level Secondary School or below	5	1.29%
Education Level High School diploma	53	13.66%
Education Level Vocational Training	22	5.67%
Education Level Technological Education, College, or equivalent	63	16.24%
Education Level University Degree	124	31.96%
Education Level Postgraduate Diploma	103	26.55%
Education Level Doctorate or above	18	4.64%
Age 18-24	36	9.11%
Age 25-34	86	21.77%
Age 35-44	128	32.41%
Age 45-54	110	27.85%
Age 55-64	29	7.34%
Age above 65	5	1.27%

**Table 2.** Monthly salary of respondents

Monthly salary	Numbers	Percentage
0 - 600 €	31	8.01%
601 € - 1200 €	131	33.85%
1201 € - 1800 €	88	22.74%
1801 € - 2400 €	53	13.70%
2401 € - 4000 €	58	14.99%
4001 € - 6000 €	16	4.13%
6001 € - above	10	2.58%

**Table 3.** Rate of concern

Rate concern	Number of responds	Percentage
Not at all	12	3.20%
Slightly	30	8.00%
Moderately	85	22.67%
Very	116	30.93%

Extremely	132	35.20%
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Most of the respondents (63%) agreed that they would be willing to pay for companion animal welfare (Table 4). Of those who answered no, the majority answered they would not because they feel they already pay too much at their municipality (Table 5).

**Table 4.** Willingness to pay

Willing to pay	Number of responds	Percentage
Yes	250	63.29%
No	145	36.71%

**Table 5.** Reasons for not being willing to pay

Reasons to answer NO to willingness to pay	Number of responds	Percentage
I already pay enough to my municipality	78	52%
I need more information regarding the issue to answer	42	28%
Other	30	20%

**Regression results.** The explanatory variables included into our model that investigated Greece's citizens' willingness to pay, were gender, age, education level, income, whether the respondents have donated in such organizations in the past, if they are considering adopting a companion animal and if they currently own companion animals. Stata 14 software was used and the results of the model for the binary independent variable are presented in Table 6.

The mathematical function that represents the model is as follows (Lopez-Feldman 2012):

$$WTP_i(z_i, u_i) = z_i\beta + u_i$$

Given  $z_i$  as a vector of explanatory variables,  $\beta$  as a vector of parameters, and  $u_i$  as an error term, it is anticipated that an individual will respond affirmatively when their willingness to pay (WTP) exceeds the proposed amount, denoted as  $t_i$ . In other words, a "yes" response is expected when  $WTP_i > t_i$ .

The mean WTP was revealed as 9.18 Euros for those who indicated (250 participants, 63,29%) they are willing to pay an amount.

Our analysis reveals that age, income, and variables related to the support of stray animals (whether they have donated before, and whether they would consider adopting a companion animal) were found to be statistically significant. In terms of age, the age range of 18-24 years was found to be more willing to pay compared to all other age ranges up to 64 years of age at the 5% level of statistical significance and over 65 years of age at the 10% level of statistical significance.

**Table 6.** (n = 386)

Would you be willing to pay an amount to help your municipality (or an animal welfare organization that collaborates with them) manage the strays in your area?	Odds Ratio	Std. Err.	P value	[95% Conf. Interval]
Gender				
Male	1.00			
Female	1.51	0.45	0.17	0.84 2.70
Age range 25-34 years	0.23	0.15	0.02	0.06 0.82
Age range 35-44 years	0.22	0.14	0.02	0.06 0.79
Age range 45-54 years	0.15	0.10	0.00	0.04 0.55
Age range 55-64 years	0.19	0.14	0.03	0.04 0.83
Age range above >65 years	0.08	0.11	0.07	0.00 1.22
Education Level High School diploma	2.03	2.85	0.61	0.13 31.76
Education Level Vocational Training	8.05	11.75	0.15	0.46 140.55
Education Level Technological Education, College, or equivalent	4.38	6.10	0.29	0.29 67.21
Education Level University Degree	3.42	4.70	0.37	0.23 50.48
Education Level Postgraduate Diploma	2.75	3.79	0.46	0.19 40.85
Education Level Doctorate	5.69	8.31	0.23	0.32 99.66
Income Level 601 €- 1200 €	2.58	1.37	0.08	0.91 7.31
Income Level 1201 €-1800 €	2.76	1.55	0.07	0.92 8.29
Income Level 1801 €-2400 €	2.93	1.76	0.07	0.91 9.49
Income Level 2401 €-4000 €	3.08	1.90	0.07	0.92 10.31
Income Level 4001 €-6000 €	9.87	9.81	0.02	1.41 69.19
Income Level 6001 € - above	3.89	3.92	0.18	0.54 28.00
Have you donated before?	3.81	1.10	0.00	2.16 6.72
Would you consider adopting a companion animal?	3.97	1.28	0.00	2.11 7.45
Are you currently a pet owner	0.90	0.25	0.70	0.52 1.55
Constant	0.16			

Income was also found to be statistically significant and positively associated with respondents' willingness to pay for companion animal welfare. Particularly, the analysis revealed that the higher the income band the more likely participants were in being willing to pay. The results are statistically significant at the 10% level of significance, except for income band 4001 € - 6,000 €, where the results indicate a 5% level of significance and income band above 6001 € which was not found to be statistically significant.

Variables associated with the support of stray animals were found to be statistically significant at the 1% level of statistical significance and positively associated with respondents' willingness to pay. Respondents who had donated before were more likely to be willing to pay compared to those who had not donated to an animal welfare cause before. Respondents who indicated that they would consider adopting a companion animal were also found to be more likely to be willing to pay than those who indicated that they would not consider adopting. Finally, gender, the level of education and whether respondents currently own a companion animal were not found to be statistically significant.

## DISCUSSION

In Greece, the municipalities are responsible for managing stray companion animals along with the assistance of non-governmental animal welfare organizations. This paper asked adult participants whether they were willing to pay an amount of money to help their municipalities with the management of stray companion animals.

The majority of respondents (63%) revealed the desire to contribute financially to their municipality to manage the stray population of companion animals. The remainder of the respondents (37%) answered no and most explained that they already pay too much to their municipality. This response may also be an indication of social trust Greece's people have towards local authorities, in accordance with international literature that has shown that higher levels of social trust correlate with a greater readiness to pay additional taxes (Habibov et al. 2017).

The employed contingent valuation model revealed that the mean amount of money people indicated as willing to pay was €9.18 per month. According to our results, 61% of the participants receive a monthly income of up to €1,800 with approximately 42% of them making up to €1,200 a month. Hence, a monthly payment of €9.18 to contribute to animal welfare management constitutes approximately 0.77% of the 42% and 0.5% of the income of 61% of the participants. According to a recent study, it was revealed that lower income households donate a larger percentage of their income compared to higher income households

(Schulz-Sandhof and Schupp 2022). In the United Kingdom people donated across all causes 1.6% of their income with an average monthly income of £3,000 GBP (National Philanthropic Trust UK 2021). Therefore, a 0.77% monthly contribution to solely stray companion animal management from a €1,200 income can be considered consistent with these broader trends.

The results indicate that the factors that influence people's willingness to pay to help stray companion animals are the age of the respondents, their history of donation and their consideration of adopting. The respondents who were younger, especially those in the first age group, 18-24, appeared to be more likely to be willing to pay. This finding is consistent with international research about Millennials and Gen Z adults who have shown an increasingly high willingness to support charitable causes in general (Jones 2024). According to the RSPCA's Animal Kindness Index, young adults aged 18 to 24 are likely to donate to animal welfare, with 66% of this age group engaging in activities to help animals in the past 12 months (RSPCA 2022). Similarly, Faunalytics highlights that people aged 18 to 24 are more willing to prioritize animal-related causes in their charitable giving compared to older age groups (Faunalytics 2021).

Furthermore, our results indicate that respondents' history of donating led to a higher probability to be willing to pay to help end cats and dogs' homelessness. According to a UK study on people's willingness to donate to stop stray dogs euthanasia, it was found that 77% of the respondents had previously donated in such causes (Sietou et al. 2013). Individuals with a history of donating to animal welfare organizations are more likely to continue supporting such causes (Bekkers and Wiepking 2011). This pattern is supported by research indicating that past donation behavior significantly influences future giving intentions (Bekkers and Wiepking 2011). Similarly, people who were inclined to the idea of adoption were revealed to be more likely to be willing to pay to contribute to the management of the stray companion animals. This finding is consistent with some studies that indicate that personal involvement, such as adoption, reinforces pro-social behaviors, including monetary contributions to related causes (Faunalytics 2021).

This survey was answered by respondents who reside in urban areas (95%) which could be considered normal for a country like Greece. According to recent research, this phenomenon has been described as uncontrolled urbanization with urban land expanding by 70% in the last thirty years (Stathakis and Baltas 2024).

According to the sociodemographic results of our research the majority of respondents were women. Females have been noticed to engage in online surveys more than males and one explanation for the recorded differences in response rates between female and male is that these differences stem from varying principles held by females and males within a gendered online context (Smith 2008). However, researchers should not presume that the completion tendencies towards online surveys, and therefore the data collected from them, is devoid of gender bias (Smith 2008). Although the results revealed that variable gender was not statistically important in our

research, Piper and Schnepf (2008) found that women are generally more generous than men in terms of the amounts donated, even after accounting for individual characteristics such as household structure, education, and income. Mesch et al. (2011) observed that women are more likely to give and give more than men, which can be attributed to higher levels of empathic concern and the principle of care.

An additional limitation of the present study is the small proportion of respondents in the over 65-year-old age band. The issue arose mainly because older people were not easily approached via online questionnaires. In a recent study it was concluded that although web surveys could be an effective option for the elderly, without a paper questionnaire there is a small but significant number of people that will be excluded (Kelfve et al. 2020).

A final consideration that may affect the validity of our results is the fact that social media was used to recruit participants. This may have resulted in a somewhat biased sample due to self-selection bias and have resulted in overestimation of the monthly amount. However, the sample size is large enough to reduce this bias.

## CONCLUSION

To the authors' knowledge, this research is the first empirical study to be conducted on Greek stray dogs and cats' management. Municipalities, on their own or in cooperation with local animal welfare organizations, are responsible by law for the management of stray dogs and cats in Greece with a set governmental budget. Hence, the aim of this study was to investigate if Greek residents would be willing to financially contribute.

The respondents revealed that they were concerned about stray companion animals in the streets of the areas they live in and most of them revealed that they would be willing to pay to help their municipalities tackle the overpopulation stray issue. From the contingent valuation method, the mean amount people were willing to pay was estimated at 9.18 euros per month.

However, this estimation does not include the proportion of people who stated that they would not be willing to financially contribute (37%). The main reason for this was that they already pay a significant amount towards municipality bills. Due to this result, it is suggested that municipalities should consider being more transparent when it comes to finances. Although Greece does have a platform 'Diavgeia' (Diavgeia 2010) where it is mandatory for all government decisions to be uploaded and published, the public does not seem to be aware of it (Eteron Institute 2022). Future research investigating citizens' awareness of Municipal finances and transparency could reveal some important factors influencing whether the public would be willing to contribute. Such research could explore whether municipalities hold open access public seminars and educational campaigns could increase public trust and willingness to pay to assist their stray management projects.

Finally, our results have provided the first robust empirical evidence on Greece's citizens willingness to pay to support Municipal efforts. The results are encouraging; however, we cannot generalize them to the entire Greek population due to the limitations of our study. These are

linked to potential self-selection bias, as respondents were recruited online and therefore those especially empathic to animal welfare issues may have decided to respond or those keen to protest to any additional funds going to municipals. Nonetheless, our willingness to pay results are consistent, realistic and provide an evidence-based platform to further investigate this very important animal welfare matter.

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**APPENDIX**

Questionnaire on the overpopulation crisis of stray pet companion animals in Greece:

Instructions for completing the questionnaire correctly

Please answer all the questions in the questionnaire.

For multiple choice questions:

o Mark the answer you want with an X in the corresponding cell.

o Only one answer to each question is allowed.

For questions that require filling in text / numbers

o Only capital Latin characters or numbers are allowed

(Depending on the type of question)

**Section A: Socio-Demographic Questions**

In this section of the questionnaire, we will be asking questions about you to guarantee diversity of the sample.

**All answers will be treated as anonymous and in complete confidentiality**

1) Please select your gender.

Male...      Female...      Other...

2) In which age group do you belong?

a) 18-24 .....

b) 25-34 .....

c) 35-44.....

d) 45-54.....

e) 55-64.....

f) > 65.....

3) What is your marital status?

a) Single .....

b) Married.....

c) Connected with a civil partnership.....

d) Separated.....

e) Divorced (from a marriage or civil partnership).....

f) Widow/er (from a marriage or civil partnership).....

4) What is your education level?

a) Mandatory education or lower.....

b) High School diploma.....

c) Vocational Degree.....

d) Technical, College or Equivalent Degree

- e) BachelorsDegree.....
- f) Masters Degree.....
- g) Doctorate Degree or higher.....

5) Which of the following best describes your occupation?

- a) Higher managerial, administrative or professional.....
- b) Intermediate managerial, administrative or professional.....
- c) Supervisory role; clerical; junior managerial, administrative or professional.....
- d) Skilled manual worker.....
- e) Semi-skilled or unskilled manual worker.....
- f) Student (full-time).....
- g) Housewife/Homemaker.....
- h) Unemployed.....
- i) Retired and reliant on State Pension.....

6) Select the household salary range per month:

- a) 0-600 €
- b) 601€- 1200€
- c) 1201€-1800€
- d) 1801-2400€
- e) 2401€-4000€
- f) 4001€-6000€
- g) 6001€ - more

7) Select the prefectures (district) you live in:

1	Attica..... <input type="checkbox"/>	16	Lasithi..... <input type="checkbox"/>	31	Chios..... <input type="checkbox"/>	46	Aetolia-Acarmania. <input type="checkbox"/>
2	Euboea..... <input type="checkbox"/>	17	Rethymno..... <input type="checkbox"/>	32	Lesbos..... <input type="checkbox"/>	47	Elias..... <input type="checkbox"/>
3	Evrytania..... <input type="checkbox"/>	18	Drama..... <input type="checkbox"/>	33	Samos..... <input type="checkbox"/>	48	Florina..... <input type="checkbox"/>
4	Phocis..... <input type="checkbox"/>	19	Evros..... <input type="checkbox"/>	34	Arcadia..... <input type="checkbox"/>	49	Grevena..... <input type="checkbox"/>
5	Phthiotis..... <input type="checkbox"/>	20	Kavala..... <input type="checkbox"/>	35	Argolis..... <input type="checkbox"/>	50	Kastoria..... <input type="checkbox"/>
6	Boeotia..... <input type="checkbox"/>	21	Rhodope..... <input type="checkbox"/>	36	Corinthia..... <input type="checkbox"/>	51	Kozani..... <input type="checkbox"/>
7	Chalkidiki..... <input type="checkbox"/>	22	Xanthi..... <input type="checkbox"/>	37	Laconia..... <input type="checkbox"/>		
8	Imathia..... <input type="checkbox"/>	23	Arta..... <input type="checkbox"/>	38	Messenia..... <input type="checkbox"/>		
9	Kilkis..... <input type="checkbox"/>	24	Ioannina..... <input type="checkbox"/>	39	Cyclades..... <input type="checkbox"/>		
10	Pella..... <input type="checkbox"/>	25	Preveza..... <input type="checkbox"/>	40	Dodecanese.... <input type="checkbox"/>		
11	Pieria..... <input type="checkbox"/>	26	Thesprotia..... <input type="checkbox"/>	41	Karditsa..... <input type="checkbox"/>		
12	Serres..... <input type="checkbox"/>	27	Corfu (Kerkyra) . <input type="checkbox"/>	42	Larissa..... <input type="checkbox"/>		
13	Thessaloniki.... <input type="checkbox"/>	28	Cephalonia..... <input type="checkbox"/>	43	Magnesia..... <input type="checkbox"/>		
14	Chania..... <input type="checkbox"/>	29	Lefkada..... <input type="checkbox"/>	44	Trikala..... <input type="checkbox"/>		
15	Heraklion..... <input type="checkbox"/>	30	Zakynthos..... <input type="checkbox"/>	45	Achaea..... <input type="checkbox"/>		

- 8) Select between the two types of areas:(**Urban** area is the area with more than 2000 inhabitants.**Rural** is the area with 2000 inhabitants or less)

Urban.....      Rural.....

- 9) What is the type of your residence?

- a) Detached house.....
- b) Duplex house.....
- c) Apartment building.....
- d) Non residential building.....

- 10) What is the number of rooms of the residence?(A **normal room** is the space inside the house, which is surrounded by walls and has at least 2 m. Height, 4 m<sup>2</sup> surface and such a shape that it can fit a regular bed. Normal rooms are the bedrooms, the dining rooms, the living rooms, the living basements and attics, the service rooms. The rooms are not considered a small kitchen (ie a kitchen less than 4 m<sup>2</sup>), corridors, verandas, vestibules. Also, spaces intended for laundry, baths, home storage and toilets, are not considered rooms, even if they have an area larger than 4 m<sup>2</sup>)

- 11) What is the number of people living in your residence?(In this survey, a **private household** is any group of people who live together under the same roof and eat together. A single-member household is one that consists of one person)

**Section B: Questions about you and companion pet animals (dogs and cats)**

- 1) General questions about companion pet animals:

	Dog	Cat	Both	None of these
Do you currently own any of these as pet(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you in the past, owned any of these as pet(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 2) How many dogs or cats do you currently have?

I don't have any animals.....

1 dog .....

1 cat .....

2 to 3 dogs.....

2 to 3 cats.....

4 or more dogs.....

4 or more cats .....

3) Have you noticed stray pet animals (dogs/cats) in the area you live?

Yes.....

No.....

4) If **Yes**, rate how much it concerns you (1=Not at all, 2=slightly, 3= moderately, 4= very, 5= extremely).

1.....	2.....	3.....	4.....	5.....
--------	--------	--------	--------	--------

5) Are you aware of public health issues and diseases (zoonoses) related to stray companion animals?

Yes.....

No.....

6) If **Yes**, rate how much it concerns you (1= Not at all, 2= slightly, 3= moderately, 4= very, 5= extremely).

1.....	2.....	3.....	4.....	5.....
--------	--------	--------	--------	--------

7) Are you aware of public security issues connected with strays such as attacks on humans or pets (bites), car accidents etc?

Yes .....

No.....

8) If **Yes**, rate how much it concerns you(1= Not at all, 2= slightly, 3= moderately, 4= very, 5= extremely).

1.....	2.....	3.....	4.....	5.....
--------	--------	--------	--------	--------

### Section C: Knowledge on Stray Pet Animal Population Management and Willingness to Pay

9) For the questions below, please indicate your answers as 'Yes' or 'No'

		Yes	No
a)	Have you ever experienced an incident involving a stray?	<input type="checkbox"/>	<input type="checkbox"/>
b)	Have you ever volunteered at an animal welfare organization?	<input type="checkbox"/>	<input type="checkbox"/>
c)	Have you ever donated to an animal welfare organization?	<input type="checkbox"/>	<input type="checkbox"/>
d)	Would you consider adopting a homeless dog from a shelter?	<input type="checkbox"/>	<input type="checkbox"/>
e)	Would you consider adopting a homeless cat from a shelter?	<input type="checkbox"/>	<input type="checkbox"/>

1) You will now be asked about your knowledge on the issue of stray dogs and cats, and how their population is managed according to the new law 4830/2021, please indicate your answers as 'Yes' or 'No'.

		Yes	No
1	It is estimated that there are more than 1 million companion animals (cats and dogs) in the streets in Greece today. Did you know this?	<input type="checkbox"/>	<input type="checkbox"/>
2	Do you know that pet owners are obliged to sterilize and microchip their pets?	<input type="checkbox"/>	<input type="checkbox"/>
3	Do you know that the owners who don't wish to sterilize their pet are obliged to send their pets' DNA at the Laboratory for Conservation and Analysis of Pet Genetic Material?	<input type="checkbox"/>	<input type="checkbox"/>
4	Do you know that responsible for stray companion pet animals are the municipalities?	<input type="checkbox"/>	<input type="checkbox"/>
5	An owner can now leave their pet in the care of their municipality for 300€ for a dog or 100€ for a cat. It is forbidden to get another pet for the following three years. Did you know that?	<input type="checkbox"/>	<input type="checkbox"/>

2) After the information provided to you from the above questions, rate how much you agree with the new law 4830/2021.

Strongly disagree	Disagree		Agree	Strongly agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Now that you have been informed that responsible for the stray pet animals are the Municipalities, you will be asked questions regarding your willingness to financially contribute in order to achieve a sustainable stray's management system. The scenario suggests you pay through your Council Tax, usually paid through the Electricity bill (DEI), or another direct way.

3) Would you be willing to pay an amount to help your municipality (or an animal welfare organization that collaborates with them) manage the strays in your area?

Yes..... No.....

4a) If Yes, would you be willing to pay 13€ or more per month for stray overpopulation management?

Yes .....  No .....

4b) If Yes, how much would be the maximum you would be willing to pay for stray overpopulation management?

.....

5) If No, would you be willing to pay 10€-12€/month for stray overpopulation management?

Yes .....  No .....

6) If No, would you be willing to pay 7€-9€/month for stray overpopulation management?

Yes .....  No .....

7) If No, would you be willing to pay 4€ -6€/month for stray overpopulation management?

Yes .....  No .....

8) If No, would you be willing to pay 1€ -3€ /month for stray overpopulation management?

Yes .....  No .....

9) If you answered No in Question 3 and 8, please select below the reason why:

- a) I already pay enough to my municipality....
- b) I need more information regarding the issue to answer....
- c) It is something that does not interest me....
- d) Other (please explain).....

“At this point our questions are over. Thank you very much. We will make sure to inform you about the results of our study.”