Survey instrument for Cross Cities Comparison of Air Quality Valuation (Jakarta)

Introduction

Dear Participant,

You have been randomly selected to participate in an important study on Jakarta's air quality. This study is conducted by researchers from universities in China, Singapore, and United States.

This short survey (about **20 minutes**) is designed to find out about your attitudes and concerns towards air quality in Jakarta.

The findings from this survey will be used to help inform policies related to air pollution issues in Asia, and there are no right or wrong response to any of the questions. You can be assured that your responses are anonymous and the data will not be traceable to you.

If you have any questions, or if you want the study's final report, please contact Professor Jie-Sheng Tan-Soo from National University of Singapore (jiesheng.tan@nus.edu.sg).

Thank you for your time and input in this research.

a. Screening questions

1. Was Jakarta your primary residence for the year 2018 (at least 10 months)?
   i) Yes
   ii) No

2. Please provide the street address in Jakarta where you lived in 2018 (Note: We just need you to provide the name of your street or general location and not your unit address).
   _____

3. Are you at least 21 years old?
   1) Yes
   2) No

b. <u>Sociodemographic questions</u>

1. What is your gender?
    1. Male
    2. Female

2. How old are you?
    Years_____

3. What is your marital status?
    1. Married
    2. Single
    3. Widow
    4. Divorced/Separated

4. What is the highest level of schooling you have attained?
    1. No schooling
    2. Primary school
    3. Secondary school
    4. Higher secondary school
    5. Vocational school
    6. Bachelor's degree
    7. Master's degree and above
    8. Doctoral degree

5. Which statement best describes your current employment?
    1. Salaried employee
    2. Head of own business
    3. Not working but looking
    4. Not working -- retired
    5. Work from home (telecommute or run business from home)
    6. Student
    7. Housewife

6. If you are employed, which of these description(s) best fit the nature of your work? (Choose all that applies)
    1. Mainly indoor
    2. Mainly outdoor
    3. My work requires physical labor most of the time
    4. My work is mostly non-physical labor

7. Please indicate the range of your monthly income (Rp)
    1. I have no income
    2. Less than 2 million
    3. 2 million to 3 million
    4. 3 million to 4 million
    5. 4 million to 6 million
    6. 6 million to 8 million
    7. 8 million to 10 million
    8. 10 million to 12 million
    9. 12 million to 15 million
    10. 15 million to 20 million
    11. 20 million to 25 million
    12. 25 million to 30 million
    13. More than 30 million

8. Please indicate the range of your household monthly income (Rp)
    1. Less than 2 million
    2. 2 million to 3 million
    3. 3 million to 4 million
    4. 4 million to 6 million
    5. 6 million to 8 million
    6. 8 million to 10 million
    7. 10 million to 12 million
    8. 12 million to 15 million
    9. 15 million to 20 million
    10. 20 million to 25 million
    11. 25 million to 30 million
    12. 30 million to 35 million
    13. 35 million to 40 million
    14. More than 40 million

9. How many people live in your household, including you? ____

10. How many 12 years old and below live in your household? ____

11. Including you, how many 60 years old and above live in your household? ____

12. What is your relationship to the head of household?
    1. I am the head of household
    2. Co-head of household
    3. Spouse
    4. Grandparents/parents/parents-in-laws
    5. Sibling
    6. Child
    7. Other family relationship

8. Friend
9. There is no head of household

c. Awareness and attitude towards air pollution

13. Thinking back over the past year, how satisfied are you with air quality in your community in Jakarta?
    1. Very satisfied
    2. Satisfied
    3. Neutral
    4. Unsatisfied
    5. Very unsatisfied

14. Air quality was _____ in my community for 2018
    1. Bad throughout the year
    2. Bad only sometimes, but not during specific seasons
    3. Bad only during specific seasons (specify month(s): _____)
    4. Bad only rarely
    5. Mostly good
    6. I don't know

15. Do you think the air quality in your community in Jakarta is better or worse than that in most other parts of Jakarta?
    1. My community has much better air quality
    2. My community has better air quality
    3. There is no difference
    4. My location has worse air quality
    5. My location has much worst air quality
    6. It depends; sometimes it is better, but other times worse
    7. I do not know

16. Compared to 2017, do you feel overall air quality in Jakarta improved in 2018?
    1. Improved significantly
    2. Some improvement
    3. Remained the same
    4. Some deterioration
    5. Worsened significantly

17. What do you think will be true about air quality in Jakarta five years from now?
    1. Will improve significantly
    2. Will have some improvement
    3. Will remain the same
    4. Will have some deterioration
    5. Will worsen significantly
    6. Don't know/ No way of forecasting

18. What do think are the ***main*** sources of air pollution in your community? (**Choose all that apply**)
    1. Industrial polluters from your city
    2. Industrial polluters from neighboring provinces
    3. Passenger vehicles (e.g. cars, motorcycles)
    4. Commercial vehicles (e.g. buses, trucks)
    5. Construction sites
    6. Neighbors or people living near you burning fuel or garbage
    7. I don't know
    8. Others, please specify: _____

19. Who do you think should be responsible to improve air quality? (**Choose all that apply**)
    1. Jakarta city government
    2. Jakarta provincial government
    3. Central government
    4. Government of neighboring provinces
    5. Government of neighboring countries
    6. Citizens and civil society
    7. Others, please specify: _____

20. If given sufficient resources, do you trust the city government to improve air quality in Jakarta?
    1. Definitely yes
    2. Probably yes
    3. Probably no
    4. Definitely no
    5. Don't know

21. What types of health issues do you think air pollution in Jakarta causes or exacerbates? **(Choose all that apply)**
    1. Premature death
    2. Asthma/Shortness of breath
    3. Cold/flu/fever/runny nose
    4. Sinus problems
    5. Lung cancer
    6. Heart issues
    7. High blood pressure/ Stroke
    8. Headaches/migraines
    9. Eyes redness/swollen/tearing
    10. Skin rashes/problems
    11. Mood swings, depressions
    12. Minimal or no health issues
    13. Don't know
    14. Others, please specify: _____

22. On any given month, which of these fuels do you use regularly (at least twice weekly) inside your residence? (e.g. for cooking purposes) (**Choose all that apply**)
    1. Wood
    2. Charcoal
    3. Coal
    4. Kerosene
    5. LPG/Butane/Propane/Natural gas/ Biogas
    6. Electricity/Solar
    7. I use none of these fuels

23. Are there any smokers among your household members who live with you ***in Jakarta***?

    1. Yes, there are _____ number of smokers among my household members
    2. No [Skip to question 27]

24. Does anybody smoke tobacco ***inside of your house in Jakarta***?

    1. Yes
    2. No [Skip to question 27]

25. How many cigarettes/cigars are smoked ***inside of your house*** per day?
    1. More than one small pack per day (there are 10 cigarette sticks in a small-sized pack)
    2. One small pack per day
    3. At most a few sticks of cigarettes/cigars per day
    4. At most one stick of cigarette/cigar per day

26. How do you feel about being exposed to cigarette smoke?
    1. I am very bothered by it
    2. I am somewhat bothered by it
    3. I am barely bothered by it
    4. I am not bothered by it
    5. I don't know

27. Do you know that air pollution levels can be measured scientifically?
    1. Yes
    2. No (skip to 30)

28. On average, how often do you consult information on local air quality?
    1. At least daily
    2. At least once a week
    3. At least monthly
    4. Very infrequent/never

29. How do you receive information on local air quality? (**Choose all that apply**)
    1. Mobile phone
    2. Radio, TV
    3. Newspaper
    4. Public display boards
    5. Computers/laptops
    6. Friends/co-workers/family members
    7. Others, please specify
    8. I do not receive information on local air quality

The three photos below are examples of **green spaces** that are found in Jakarta. The greenery in these areas consists of grass and shrubs and/or trees. Residents often gather at these places for exercising, brisk walks, picnics, and many other activities.

Source: whatsnewjakarta.com

Source: gettyimages.com

Source: whatsnewjakarta.com

Based on this definition of green spaces, please answer the following questions:

30. Is your home located within walking distance to green spaces (such as parks and recreational areas)?
    1. Yes
    2. No

31. How often do you visit green spaces for leisure and recreational purposes, including physical activity?
    1. At least daily
    2. At least once a week
    3. At least monthly
    4. Very infrequent/never

32. Among the four options listed below, where would you rather be under different air quality conditions for leisure and recreational purposes? Please indicate your most preferred and least preferred choice.

On a day with **perfect** air quality and **comfortable** climate, where would you prefer to be for leisure and recreational purposes?

1. In my home, without air purifiers in operation (see handout if you do not know what is an air purifier)
2. In my home, with air purifiers in operation (note that an air purifier usually cost around Rp1.000.000 to Rp6.000.000)
3. Outside of my home, but mostly indoors, e.g., shopping malls, restaurants, cinemas etc…
4. Outside of my home, at green spaces

A) Most preferred: _____; B) Least preferred: _____

On a day with **bad** air quality (think of this as the worst air pollution you have experienced in Jakarta) and **comfortable** climate, where would you prefer to be for leisure and recreational purposes?

1. In my home, without air purifiers in operation (see handout if you do not know what is an air purifier)
2. In my home, with air purifiers in operation (note that an air purifier usually cost around Rp1.000.000 to Rp6.000.000)
3. Outside of my home, but mostly indoors, e.g., shopping malls, restaurants, cinemas etc…
4. Outside of my home, at green spaces

E) Most preferred: _____; F) Least preferred: _____

d. Contingent valuation

Jakarta's air pollution is around **1.29 times worst** than the national air quality standards set by the **Ministry of Environment**. Hence, air quality in Jakarta **does not meet** the national standards.

Here are photos of the Jakarta's skyline on days with high levels of air pollution. The air quality on both days was very bad.

Image source: asiapacificreport.nz

Image source: en.tempo.co

Information on health impacts of air pollution

The current level of air pollution in Jakarta is known to pose significant public health risks.

Jakarta's air pollution is around **1.29 times worst** than the national pollution limits set by the **Ministry of Environment**. Hence, air quality in Jakarta **does not meet** the national standards.

According to scientists, when compared to the **national standards** set by the Ministry, these are the following known mortality risks at Jakarta's current levels of air pollution:

a. About 10% more likely to die from respiratory illnesses
b. About 4% more likely to die from lung cancer
c. About 3% more likely to die from heart diseases
d. About 8% more likely to die from stroke

Apart from these mortality risks, risks of sickness from various physical ailments (such as asthma and bronchitis) also increase because of air pollution. There is also new evidence showing that exposure to air pollution is associated with increased risks of mental illness, including depression, dementia, and Alzheimer's diseases.

33. Jakarta's air pollution is around **1.29 times worst** than national air quality standards by the **Ministry of Environment**. Hence, air quality in Jakarta **does not meet** the national standards. Beginning from 2019, I want you to imagine that Jakarta could begin a series of stricter controls and measures to improve air quality, such as limiting factories emissions, stricter emissions standards for new vehicles, limiting crop burnings, increasing tree planting. Other than these examples, other measures could be implemented.

    Now, I want you to imagine that the program **will be successful**, and these measures would reduce Jakarta's annual pollution from its current level to meet **national air quality standards**.

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Now, I want you to imagine that the program **will be successful**, and these measures would reduce Jakarta's annual pollution from its current level to meet **national air quality standards**.

These controls and measures would require a mandatory fee to be paid by **all** Jakarta residents. Hence, all Jakarta residents are required to vote whether they are in favor of implementing these measures.

Here, we want you to indicate whether you would vote "Yes" or "No" for this program if the mandatory fee is as stated in the question.

Before responding, please consider that if you contribute money towards this air quality improvement program, you are not going to be able to spend money on other things. In other surveys, we have seen that people sometimes give very high amounts because they have not carefully considered the other things they could buy with the money. Others give very small amounts because they do not think about all benefits.

There is no right or wrong answer, and it is important to us that you answer the following question as carefully and accurately as possible.
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There is no right or wrong answer, and it is important to us that you answer the following question as carefully and accurately as possible.

Here, we want you to indicate whether you would vote "Yes" or "No" for this program if the mandatory fee is as stated in the question.

How would you vote for this air quality improvement program if all residents are each required to pay Rp.XXX ***annually***?

1. I vote Yes
2. I vote No

Option (Rp.)
60,000
300,000
1,000,000
1,500,000
2,000,000
~~~~

34. {If "*I vote Yes*" in question 33} What were the reason(s) that made you vote in favor for the program? (**Choose all that apply**)
    1. Improving air quality will improve everyday health for me and for people that I care about
    2. I fear the mortality risk from high air pollution
    3. I don't like the smell of air pollution
    4. Improving air quality would allow me and my family to participate in more outdoor activities
    5. It costs too much to operate air purifiers and buy masks whenever air pollution is bad
    6. It is too mentally stressful to have to check outdoor air quality status before I leave home everyday
    7. I am concerned that if we do not control this problem now, it will be even more difficult to improve air quality in future
    8. Others, please specify: _____

    {If "*I vote Yes*" in question 33} What were the reason(s) that made you unwilling to vote in favor of the program? (**Choose all that apply**)
    1. I do not have enough money to pay this fee
    2. Air pollution is not a problem for me and my family
    3. Air quality improvement should not be paid for by Jakarta residents as this problem is caused by neighboring provinces/factories
    4. Jakarta residents are already paying enough taxes
    5. I do not believe it is possible to improve air quality in Jakarta
    6. I do not trust the government to use the money wisely
    7. Others, please specify: _____

e. Averting behaviors

35. You may have undertaken some of the following activities or behavior changes during period of poor air quality in Jakarta in the year 2018.

    For each of these activities, please indicate the option that is applicable.

    a. Did you purchase face masks?
        1. No
        2. Yes, Rp.____ spent in purchasing face masks in 2018.

    b. Did you purchase air purifiers for home? (see handout if you do not know what is an air purifier)
        1. No
        2. Yes, we bought ___ air purifiers in 2018 and spent Rp.____

    c. Did you purchase air conditioners to improve air quality for home?
        1. No
        2. Yes, we bought ___ air conditioners in 2018 and spent Rp.____

    d. Did you spend any money on your household to treat common air pollution-related illnesses such as asthma, allergic reactions?
        1. No
        2. Yes, we spend Rp._____ in 2018.

    e. Did you leave temporarily leave Jakarta with your household escape air pollution in 2018?
        1. No
        2. Yes, we left Jakarta ___ times in 2018 and spent a total of Rp.____ on transportation, food, lodging, and etc…

f. Time tradeoff

36. I want you to imagine another scenario now. Suppose that the two situations shown below could occur. **Both situations would be in Jakarta.**

    In the first situation, you would live longer by good fortune. However, Jakarta would have constant high levels of air pollution (think of this as the worst air quality you have encountered in Jakarta).

    In the second situation, you would not live as long, but Jakarta would have perfect air quality.

    Note that it will be a quick and painless death in both situations.

    Choose which of these two options you prefer.

	Option 1	Option 2
Lifespan:	75 years	60 years (you could die from accidents)
Air pollution:	Bad air	Perfect/clean air

    I choose _____.
    1. Option 1 {Go to Question 37}
    2. Option 2 {Go to Question 38}
    3. I am unable to choose

37. {If Option 1} Now consider this new set of options

	Option 1	Option 2
Lifespan:	75 years	65 years (you could die from accidents)
Air pollution:	Bad air	Perfect/clean air

    I choose _____.
    1. Option 1
    2. Option 2
    3. I am unable to choose

38. {If Option 2} Now consider this new set of options

	Option 1	Option 2
Lifespan:	75 years	55 years (you could die from accidents)
Air pollution:	Bad air	Perfect/clean air

I choose _____.

1. Option 1
2. Option 2
3. I am unable to choose

Description and examples of air purifiers sold in Indonesia

mybest

HOME / home electronics, PC, camera / 10 Rekomendasi Air Purifier Terbaik (Terbaru Tahun 2018)

2018.01.16

10 Rekomendasi Air Purifier Terbaik (Terbaru Tahun 2018)

Air purifier adalah alat untuk membersihkan udara di ruangan, sehingga udara yang Anda hirup dapat lebih bersih dan bebas polusi. Saat ini *air purifier* tersedia dengan berbagai fungsi tambahan, seperti humidifikasi, aroma, dan menyaring serbuk sari bunga yang seringkali menyebabkan alergi.

Air purifier cenderung memiliki harga yang tidak murah sehingga Anda tidak bisa sembarangan memilihnya. Pada artikel ini, kami akan memberikan tips memilih dan merekomendasikan produk terbaik menurut kami. Sebelum itu, ayo simak fungsi *air purifier* untuk ruangan Anda!

jualelektronik.com

Cari produk, kategori atau merek

Shop By Category

Order Status

Home › Brand › Our Brand › Sharp › Sharp Air Purifier – FPF30Y

Sharp Air Purifier – FPF30Y

Brand : Sharp
Product SKU : FPF30Y

Sharp Air Purifier - FPF30Y dilengkapi dengan Plasmacluster Generator yang terimplentasi ke dalam produk ini, akan melepaskan ion Positif dan Negatif ke udara lalu memburu elemen kasat mata yang berbahaya seperti Virus, Jamur, Alergen, Bau, dsb hingga ke sudut ruangan. Ion tersebut akan membentuk Hidrosil pada permukaan partikel untuk melumpuhkannya. Hidrosil (OH-) merupakan senyawa radikal yang aktif akan mengambil atom hidrogen dan langsung menonaktifkannya, sehingga partikel berbahaya tadi seperti Virus, Jamur, Alergen, Bau dan sebagainya menjadi lumpuh.

Warna : **Putih**

- Plasmacluster High Density Ions
- Applicable Coverage Area for 21 m^2
- Dust Sensor
- Mode Speed (Max/High/Low)
- HEPA Filter

Spesifikasi Produk Dapat Dilihat Di Sini...

SHARP Service Center

Product Description

Sharp Air Purifier – FP F30Y terdapat Ion generator yang dapat menghasilkan ion-ion Plasmacluster, ion positif dan ion negatif secara aktif berubah menjadi Hidroksil (OH-) dan menarik dengan cepat Hidrogen (H+) dari mikro organisme yang akan berubah menjadi (H2O), dinonaktifkan.

Filter Performance

Mau penghasilan tambahan?