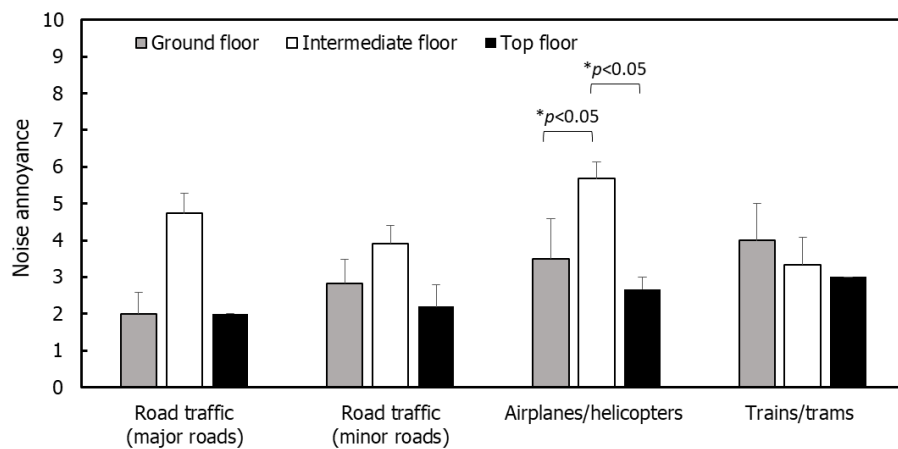
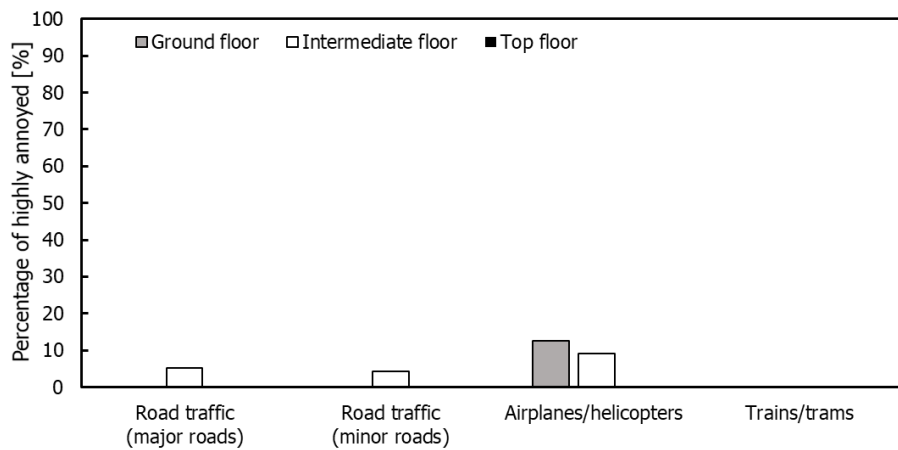


(a)

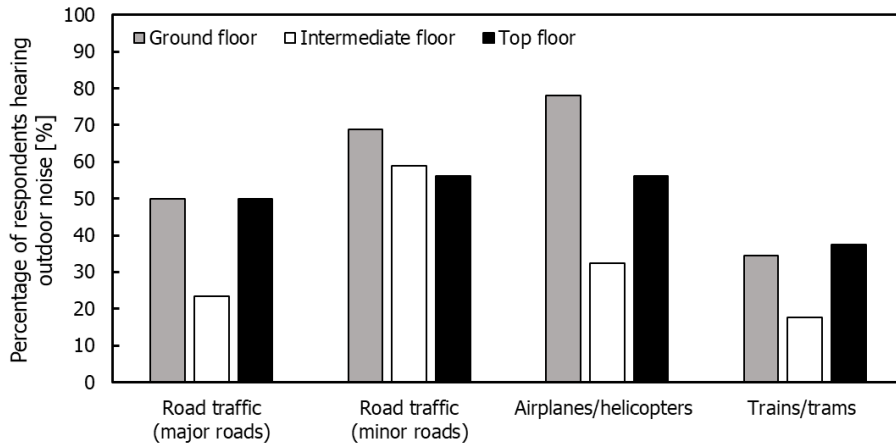


(b)

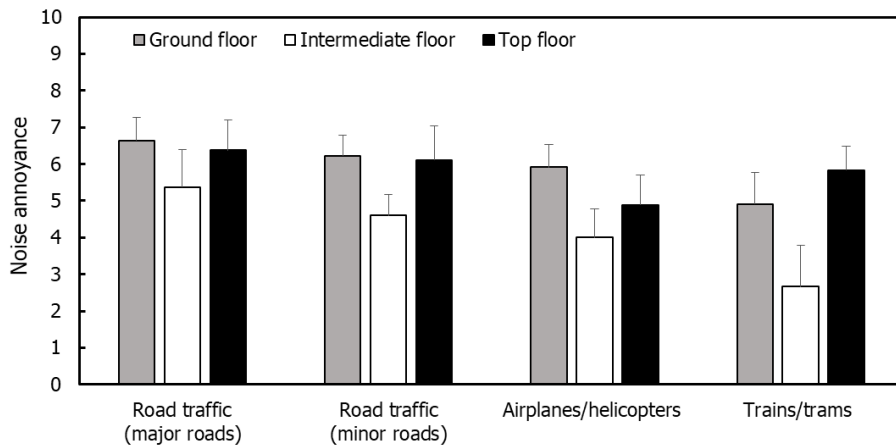


(c)

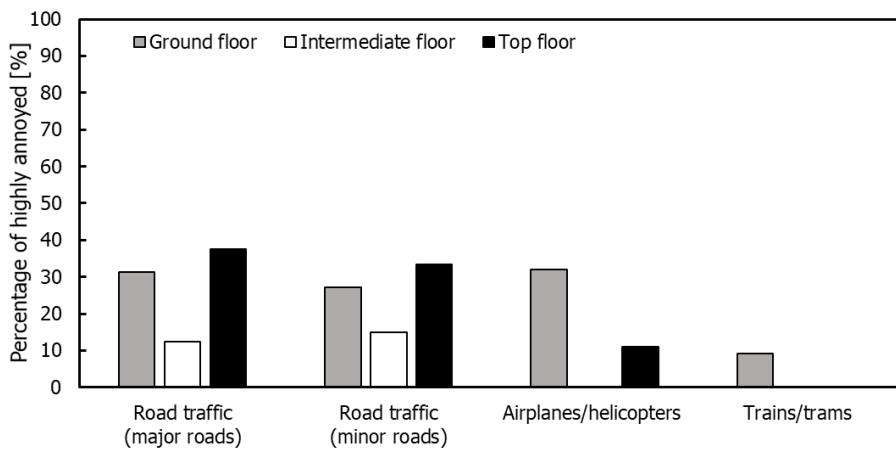
Figure S1. Outdoor noise in Seoul across the floor on which the respondents live (a) percentage of respondents hearing noise, (b) mean annoyance ratings, (c) %HA ratings. Error bars indicate standard errors ( $* p < 0.05$ ).



(a)

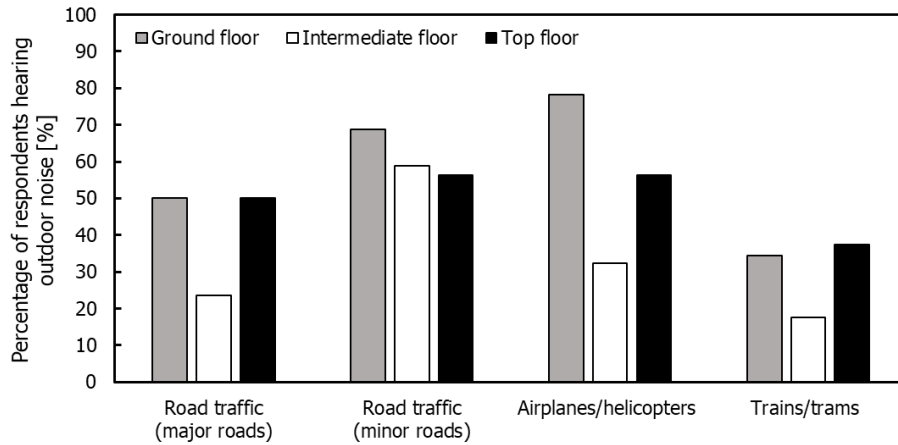


(b)

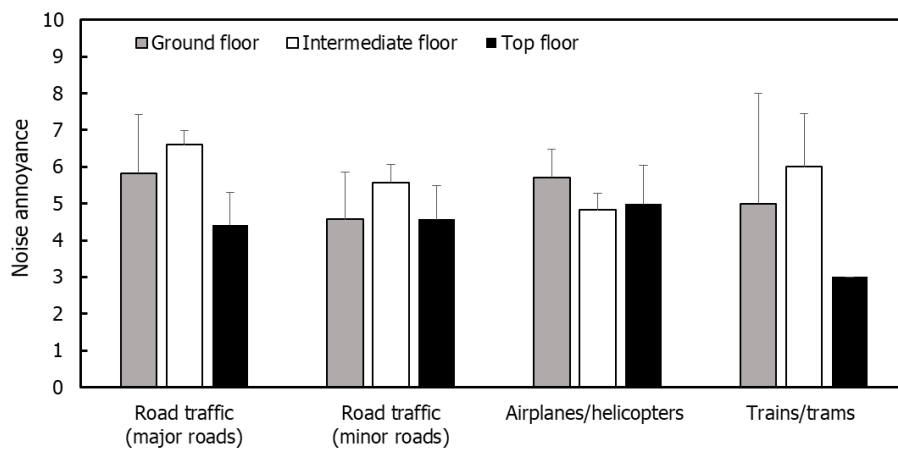


(c)

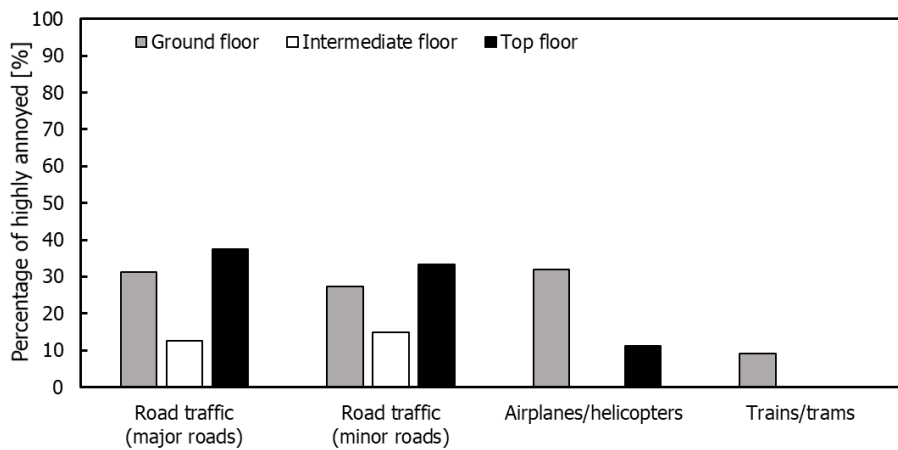
Figure S2: Outdoor noise in London across the floor on which the respondents live (a) percentage of respondents hearing noise, (b) mean annoyance ratings, (c) %HA ratings. Error bars indicate standard errors.



(a)



(b)



(c)

Figure S3: Outdoor noise in São Paulo across the floor on which the respondents live (a) percentage of respondents hearing noise, (b) mean annoyance ratings, (c) %HA ratings. Error bars indicate standard errors.

# Text Material S1: Questionnaire.

## INFORMATION ABOUT YOUR HOME

**1. How satisfied are you with your home in terms of:**

**a. Location to amenities (e.g. shops, parks)**

( ) not at all ( ) slightly ( ) moderately ( ) very ( ) extremely

**b. Transport links**

( ) not at all ( ) slightly ( ) moderately ( ) very ( ) extremely

**c. Safety of the neighbourhood**

( ) not at all ( ) slightly ( ) moderately ( ) very ( ) extremely

**b. Number of rooms**

( ) not at all ( ) slightly ( ) moderately ( ) very ( ) extremely

**c. Size of the rooms**

( ) not at all ( ) slightly ( ) moderately ( ) very ( ) extremely

**2. What is your postcode?** \_\_\_\_\_ (Note: If you don't wish to tell us your full postcode, the first 3 or 4 letters/numbers are sufficient.)

**3. Please describe the type of dwelling**

- a. Flat/ studio
- b. Semi-detached house
- c. Terraced house
- d. Detached house

FOR FLATS/STUDIOS ONLY:

**3.a. On which floor do you live?**

- a. Top floor
- b. Intermediate floor
- c. Ground floor

FOR FLATS/STUDIOS AND HOUSES:

**4. How long have you been living in this flat/studio/house?**

- a. Less than 1 year
- b. Between 1 and 5 years
- c. Over 5 years

IF OVER 5 YEARS, GO TO 4a

**4a Please tell us how many years you have been living in this flat/studio/house.**

You can give an approximate number of years.

**5. In what part of your flat/ house do you spend most of your time during the day?**

( ) Living room ( ) Home office ( ) Bedroom

WE ARE GOING TO ASK THESE QUESTIONS SEPARATELY FOR: FLAT/LIVING ROOM, FLAT/ HOME OFFICE, FLAT/ BEDROOM, HOUSE/ LIVING ROOM, HOUSE/ HOME OFFICE, HOUSE/ BEDROOM, DEPENDING ON THE ANSWERS THEY GAVE IN THE PREVIOUS QUESTIONS

**NOISE FROM OUTSIDE YOUR HOME\***

6. When you are in your bedroom/ living room/ home office with the windows closed, do you hear noise from outside your home (e.g. major and minor roads, airplanes, helicopters, trains, trams)? Yes/No

IF YES, GO TO 7. IF NO, GO TO 11

7. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear road traffic noise from major roads (motorways, dual carriageways and A roads)? Yes/No

IF YES, GO TO 7a

- 7.a How much does noise from major roads (motorways, dual carriageways and A roads) annoy you?

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

8. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear road traffic noise from minor roads (B roads, minor roads, cul-de-sacs)? Yes/No

IF YES, GO TO 8a

- 8.a How much does noise from minor roads (B roads, minor roads, cul-de-sacs) annoy you?

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.



**NOISE FROM COMMUNAL AREAS IN YOUR BUILDING\*(ONLY FOR FLATS)**

**11. When you are in your bedroom/ living room/ home office with the windows closed, do you hear noise from communal areas in your building (e.g. from talking, shouting, footsteps, jumping, running, doors closing)? Yes/No**

*IF YES, GO TO 12. IF NO, GO TO 18*

**12. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear noise from talking and/or shouting that come from communal areas in your building? Yes/No**

*IF YES, GO TO 12a*

**12.a How much does noise from talking and/or shouting that come from communal areas in your building annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

**13. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear noise from footsteps and/or jumping and/or running that come from communal areas in your building? Yes/No**

*IF YES, GO TO 13a*

**13.a How much does noise from footsteps and/or jumping and/or running that come from communal areas in your building annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
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**16. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear any other noise from communal areas in your building? Yes/No**

*IF YES, GO TO 16a AND 16b. IF NO, GO TO 18*

**16.a Please describe this noise source here \_\_\_\_\_**

**16.b How much does this noise from communal areas in your building annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

**17. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear any other noise from communal areas in your building? Yes/No**

*IF YES, GO TO 17a AND 17b. IF NO, GO TO 18*

**17.a Please describe this noise source here \_\_\_\_\_**

**17.b How much does this noise from communal areas in your building annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

**NOISE FROM NEIGHBOURS' PROPERTY\***



21. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear noise from dropped objects (e.g. children dropping toys) that come from your neighbours' property? Yes/No

*IF YES, GO TO 21a*

**21.a How much does noise from dropped objects (e.g. children dropping toys) that come from your neighbours' property annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

22. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear noise from movement of furniture (e.g. chairs dragged across the floor) that come from your neighbours' property? Yes/No

*IF YES, GO TO 22a*

**22.a How much does noise from movement of furniture (e.g. chairs dragged across the floor) that come from your neighbours' property annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

23. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear noise from doors closing that come from your neighbours' property? Yes/No

IF YES, GO TO 23a

**23.a How much does noise from doors closing that come from your neighbours' property annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

**24. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear noise from TV and/or Music and/or Video games and/or Radio that come from your neighbours' property? Yes/No**

IF YES, GO TO 24a

**24.a How much does noise from TV and/or music and/or video games and/or radio that come from your neighbours' property annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

**25. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear noise from telephone ringing that come from your neighbours' property? Yes/No**

IF YES, GO TO 25a

**25.a How much does noise from telephone ringing that come from your neighbours' property annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

**26. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear noise from light switches (turned on and off) and/or electric sockets (plugs being inserted into sockets) that come from your neighbours' property? Yes/No**

*IF YES, GO TO 26a*

**26.a How much does noise from light switches (turned on and off) and/or electric sockets (plugs being inserted into sockets) that come from your neighbours' property annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

**27. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear noise from home appliances (washing machine, dish washer, tumble dryer, vacuum cleaner) that come from your neighbours' property? Yes/No**

*IF YES, GO TO 27a*

**27.a How much does noise from home appliances (washing machine, dish washer, tumble dryer, vacuum cleaner) that come from your neighbours' property annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

**28. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear noise from dogs barking that come from your neighbours' property? Yes/No**

*IF YES, GO TO 28a*

**28.a How much does noise from dogs barking that come from your neighbours' property annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

**29. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear noise from water installations (water sounds from pipes, plumbing, flushing toilet, shower, bath) that come from your neighbours' property? Yes/No**

*IF YES, GO TO 29a*

**29.a How much does noise from water installations (water sounds from pipes, plumbing, flushing toilet, shower, bath) that come from your neighbours' property annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

**30. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear any other noise from your neighbours' property?**  
Yes/No

*IF YES, GO TO 30a AND 30b. IF NO, GO TO 32*

**30.a Please describe this noise source here \_\_\_\_\_**

**30.b How much does this noise from your neighbours' property annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>

**31. Thinking about when you are in your bedroom/ living room/ home office with the windows closed, do you hear any other noise from your neighbours' property?**  
Yes/No

*IF YES, GO TO 31a AND 31b. IF NO, GO TO 32*

**31.a Please describe this noise source here \_\_\_\_\_**

**31.b How much does this noise from your neighbours' property annoy you?**

This uses a scale from 0-to-10. If you are not annoyed at all choose 0; if you are extremely annoyed choose 10; otherwise, choose a number between 0 and 10, that represents your annoyance.

0 = Not at all annoyed										10 = Extremely annoyed
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0	1	2	3	4	5	6	7	8	9	10

### RELATIONSHIP WITH YOUR NEIGHBOUR

**32. Do you know which of your neighbours causes the noise?**

None of them  Some of them  All of them  I don't have noisy neighbours

IF YOU CHOOSE SOME OR ALL:

**32a How would you describe your relationship with this neighbour that lives (answer as applicable):**

**a. Above you**

not at all close  slightly close  moderately close  very close  extremely close

**b. Below you**

not at all close  slightly close  moderately close  very close  extremely close

**c. On one side**

not at all close  slightly close  moderately close  very close  extremely close

**d. On the other side**

not at all close  slightly close  moderately close  very close  extremely close

### SENSITIVITY TO NOISE

**33. Thinking about the noise you experience when you are in your home that comes from your neighbours' property, please indicate your agreement with the following statements.**

This uses a 1-to-5 scale. If you disagree strongly choose 1; if you agree strongly choose 5; otherwise, choose a number between 2 or 4, that represents your level of agreement.

**1. I feel vulnerable when it is noisy and I am trying to get to sleep.**

Disagree strongly 1 2 3 4 5 Agree strongly

**2. I don't feel happy when it is noisy.**

Disagree strongly 1 2 3 4 5 Agree strongly

**3. I am easily awakened by noise.**

Disagree strongly 1 2 3 4 5 Agree strongly

**4. It is difficult for me to adapt to noise.**

Disagree strongly 1 2 3 4 5 Agree strongly

**5. I don't feel safe when it is noisy.**

Disagree strongly 1 2 3 4 5 Agree strongly



6. **I find it difficult to get to sleep when there is noise.**  
Disagree strongly 1 2 3 4 5 Agree strongly
7. **I am sensitive to noise.**  
Disagree strongly 1 2 3 4 5 Agree strongly
8. **I cannot relax when it is noisy.**  
Disagree strongly 1 2 3 4 5 Agree strongly
9. **I cannot concentrate when it is noisy.**  
Disagree strongly 1 2 3 4 5 Agree strongly

### **REACTION TO NOISE**

34. **Thinking about the noise you experience when you are in your home that comes from your neighbours' property, how often do you react as indicated below?**

This uses a 1-to-5 frequency scale. If your answer is never, choose 1; if it is always choose 5; otherwise, choose a number between 1 to 5, that represents how frequently it happens to you

- a. **I accept that I cannot do anything to stop the noise.**

Never 1      2      3      4      5 Always

- b. **I talk to someone about the problem.**

Never 1      2      3      4      5 Always

- c. **I start to talk louder when I'm in a conversation.**

Never 1      2      3      4      5 Always

- d. **I increase the volume of the radio/TV/music.**

Never 1      2      3      4      5 Always

- e. **I think about moving to a different property.**

Never 1      2      3      4      5 Always

- f. **I go outside.**

Never 1      2      3      4      5 Always

- g. **I imagine (or daydream about) a better time or place.**

Never 1      2      3      4      5 Always

- h. **I outwardly express anger towards the neighbours that create the noise.**

Never 1      2      3      4      5 Always

- i. **I resign myself to it.**

Never 1      2      3      4      5 Always

- j. **I use an activity to distract me.**

Never 1      2      3      4      5 Always

- k. **I knock on the wall, floor or ceiling or shout.**

Never 1      2      3      4      5 Always

**l. I inwardly express anger towards the neighbours that create the noise.**

Never 1      2      3      4      5 Always

**m. I go into a different room.**

Never 1      2      3      4      5 Always

**n. I say to my neighbour that I don't hear them, even though I do.**

Never 1      2      3      4      5 Always

**o. I try to ignore the noise.**

Never 1      2      3      4      5 Always

## **COMPLAINTS**

**35. Have you ever complained about the noise from your neighbours' property?**

( ) Yes      ( ) No

### **IF YES:**

**35.a. How did you complain? You may select more than one.**

- a. By calling the neighbour on the intercom or by telephone
- b. By writing a note to the neighbour
- c. By complaining directly to the neighbour (Face to face contact)
- d. By bringing up the question of "noise" at meetings of the tenants
- e. By contacting the property management office
- f. By calling the police and/or local security
- g. By contacting a Government office or/and local council (e.g. \_\_\_\_\_)
- h. Other:

## **DEMOGRAPHIC DATA**

**36. Age:** \_\_\_ 18 to 35    \_\_\_ 36 to 50    \_\_\_ 51 to 64    \_\_\_ 65 or over

**37. Gender:** \_\_\_ Male      \_\_\_ Female

**38. Are you British/Brazilian/Korean? (DELETE AS APPLICABLE)**

( ) Yes      ( ) No \_\_\_\_\_ *(IF NO, SPECIFY YOUR NATIONALITY)*

**39. Education**

- a. School level
- b. University level

**40. Employment Status**

- a. Full-Time worker
- b. Part-Time worker
- c. Self-employed
- d. Unemployed
- e. Student
- f. Homemaker (looking after family at home)
- g. Retired

IF YOU CHOSE a, b or c, GO TO 39a

**39.a What are your work hours?**

- a. Day shift
- b. Night shift
- c. Varies between night and day shifts

**41. Annual household income (VALUES WILL BE CONVERTED TO CURRENCIES FOR KOREA AND BRAZIL)**

- a. Below £ 10,700 per annum
- b. Between £ 10,700 and £ 53,500 per annum
- c. Between £ 53, 500 and £ 107,700 per annum
- d. At least £ 107,700 per annum
- e. Not known

**42. People you live with**

- No-one (i.e. alone)
- With people who are not your family
- With family including children under the age of 12 years old
- With family including children over the age of 12 years old
- With family but without children

*Thank you for participating in our study about attitudes to noise inside dwellings in London/Seoul/Sao Paulo. (DELETE AS APPLICABLE)*