A dataset to study equity in individual travel behavior and choices in Santiago, Chile

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# Abstract

The data set presented in this article would be advantageous to give intuition about the experience of daily travel and its psychological impact on travelers, ranging from positive feelings of enjoyment in some to the sensation of stress in many others. This dataset particularly examines the feelings of stress by users of active and motorized modes of transportation. Furthermore, it also investigates the importance that travelers attach to their feelings of stress. This allows us to explore the concept of “limited horizons”, the normalization of subpar experiences by those less able to adapt. This data provides information about commuters in terms of their individual characteristics, health-related factors while using transportation modes, feelings and emotions towards different modes of travel, own decisions, social interaction, attitudes towards nature and sustainability, shifts between modes, attitudes towards built environment, traveling to work. Data for the research are drawn from a survey conducted in Santiago, Chile, based on a quota-sampling method based on the information from Pre-Census of 2012, and in total, 451 persons validly completed the survey. Describe the statistics and conclude suggest that

## Key words

* Travel behavior
* Well-being
* Equity
* Transportation
* Santiago
* Chile

## Specifications Table

See [Table 1](#tbl-specifications) for details of the data set.

Table 1: Specifications table

| Items | Explanation |
| --- | --- |
| Subject area | Transportation, Geography, Public Health and Health Policy, Urban development |
| More specific subject area | Transport inequalities, Stress and limited horizons, Travel behavior, Global South |
| Type of data | R Data Package |
| How data was acquired | The survey conducted using questionnaire. The instrument contains descriptive data of respondents and 5-Likert scale questionnaire regarding most sections of the questionnaire |
| Data format | Raw Data |
| Parameters for data collection | The survey collected by a quota-sampling method based on the information from Pre-Census of 2012, and in total, 451 persons validly completed the survey and face-to-face in Santiago, Chile in 2016. The survey collected information on a wide range of travel-related issues (socio-demographics, health-related, perceptions and travel behavior, travel choices and planning, social interaction factors, built environment, among others) |
| Description of data collection | Data was acquired through the 5-Likert scale questionnaire regarding most sections of the questionnaire, using a face-to-face and quota-sampling method for individual characteristics |
| Data source location | Santiago, Chile |
| Data accessibility | State if data is with this article or in public repository. If public repository, please explicitly name repository and data identification number and provide a direct URL to data |

## Value of the data

A large body of the data has made inroads investigating psychological impact on travelers ranging from positive feelings of enjoyment in some to the sensation of stress in many others that can affect the effectiveness of policy measure (in the case of positive feelings) and are known to affect health outcomes (in the case of stress). This would be interesting for those with transport policies concerns. Dataset contribute to psychological impact on travelers both active and motorized modes of transportation to examines not only the feeling of stress, but also how these effects are experienced by travelers and investigates the importance that travelers attach to their feelings of stress which makes it valuable for researchers who focused on public sector development and health-related policies. This dataset allows us to explore the concept of “limited horizons”, the normalization of subpar experiences by those less able to adapt, an advantageous resource for further research regarding transport inequalities, index of stress, travel behavior in the region or even as a representative for other areas with similar attributes. The dataset provides a wide range of travel-related issues such as socio-demographics, health-related, perceptions and travel behavior, travel choices and planning, social interaction factors, built environment, among others.

## Data

The data package described in this paper contains XX tables as listed in [Table 2](#tbl-list-of-tables). Each table is thematic and includes information about the individual characteristics, health information, feelings and emotions information, reason and planning decision of respondents, social interaction of respondents, nature and sustainability, telecommunication and shifting, built environment and travel-work related information. As can be seen in data set, we have a wide variety of variables in each section.

Table 2: List of tables in data package

| Table | Theme |
| --- | --- |
| Santiago\_IC | A table with 23 variables that describe the individual characteristics of respondents |
| Santiago\_H | A table with XX variables with health attributes of respondents |

Data collected regarding individual characteristics reveals interesting difference when it comes to gender, age, income, main mode of transport and so on. Among persons who responded to the survey, males have far more higher income levels than females. It can be seen among people who have a salary more than 997 dollars and 18 aged until 54, using different modes of travel as the main mode is almost similar in terms of using car and metro.These information give insights about different segments of gender, age and so on to organize planning decisions for them according to their requirements. Also this part would be advantageous for business to figuring out marketing and applying strategies for future patterns based on consumer demands.

(a) Data summary

|  |  |
| --- | --- |
| Name | Santiago\_IC |
| Number of rows | 451 |
| Number of columns | 23 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Column type frequency: |  |
| character | 8 |
| factor | 10 |
| numeric | 5 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Group variables | None |

**Variable type: character**

| skim\_variable | n\_missing | complete\_rate | min | max | empty | n\_unique | whitespace |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ORIGIN | 406 | 0.10 | 1 | 10 | 0 | 6 | 0 |
| r0A\_COMMUNE | 0 | 1.00 | 4 | 16 | 0 | 43 | 0 |
| r0B\_MACR\_ZONE | 0 | 1.00 | 3 | 12 | 0 | 7 | 0 |
| r0B\_STREET\_1 | 38 | 0.92 | 4 | 24 | 0 | 200 | 0 |
| r0B\_STREET\_2 | 108 | 0.76 | 1 | 23 | 0 | 211 | 0 |
| r0I\_COM\_TRAB\_1 | 18 | 0.96 | 4 | 16 | 0 | 30 | 0 |
| r0I\_COM\_TRAB\_2 | 371 | 0.18 | 1 | 16 | 0 | 25 | 0 |
| r0O\_TYPE\_DIS | 440 | 0.02 | 5 | 19 | 0 | 10 | 0 |

**Variable type: factor**

| skim\_variable | n\_missing | complete\_rate | ordered | n\_unique | top\_counts |
| --- | --- | --- | --- | --- | --- |
| r0C\_GENDER | 0 | 1.00 | FALSE | 2 | FEM: 242, MAL: 209 |
| r0D\_AGE | 1 | 1.00 | FALSE | 6 | 35t: 135, 18t: 134, 25t: 125, 55t: 44 |
| r0G\_EDUCATION | 1 | 1.00 | FALSE | 5 | COL: 223, SEC: 104, PRO: 84, POS: 29 |
| r0H\_OCCUPATION | 1 | 1.00 | FALSE | 9 | FUL: 257, STU: 101, SEL: 26, HOM: 19 |
| r0J\_INCOME | 6 | 0.99 | FALSE | 6 | 977: 90, 238: 83, Les: 71, 155: 68 |
| r0N\_DRIVING\_LICENSE | 0 | 1.00 | FALSE | 2 | YES: 260, NO: 191 |
| r0M\_DISABILITY | 0 | 1.00 | FALSE | 2 | NO: 435, YES: 16 |
| r0P\_MODE1 | 0 | 1.00 | FALSE | 8 | MET: 160, CAR: 115, BUS: 110, WAL: 22 |
| r0Q\_MODE2 | 15 | 0.97 | FALSE | 8 | MET: 136, BUS: 131, CAR: 66, WAL: 32 |
| r0R\_MODE3 | 92 | 0.80 | FALSE | 8 | CAR: 74, WAL: 62, BUS: 59, TAX: 51 |

**Variable type: numeric**

| skim\_variable | n\_missing | complete\_rate | mean | sd | p0 | p25 | p50 | p75 | p100 | hist |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ID | 0 | 1.00 | 226.00 | 130.34 | 1 | 113.5 | 226 | 338.50 | 451 | ▇▇▇▇▇ |
| r0E\_WEIGHT | 29 | 0.94 | 69.60 | 13.09 | 42 | 60.0 | 68 | 79.75 | 120 | ▃▇▅▂▁ |
| r0F\_HEIGHT | 20 | 0.96 | 167.21 | 9.46 | 146 | 160.0 | 167 | 174.00 | 197 | ▃▇▇▃▁ |
| r0K\_ADULTS | 5 | 0.99 | 2.81 | 1.29 | 1 | 2.0 | 3 | 4.00 | 7 | ▇▃▃▁▁ |
| r0L\_CHILDREN | 6 | 0.99 | 0.66 | 0.92 | 0 | 0.0 | 0 | 1.00 | 6 | ▇▂▁▁▁ |

Table 3: Variables regarding individual characteristics of respondents

: Variables regarding individual characteristics of respondents {#tbl-specifications}

Health information could be useful in investigating affects of transportation policy decisions on public health.This information would be useful for planners and transportation experts to develop transport models used to identify how different policies or plans could affect active modes of travel and public transit. Having such a detailed data set would help them to adapt reform policies and management strategies in accordance with public health goals.

Data summary

|  |  |
| --- | --- |
| Name | Santiago\_H |
| Number of rows | 451 |
| Number of columns | 12 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Column type frequency: |  |
| factor | 12 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Group variables | None |

**Variable type: factor**

| skim\_variable | n\_missing | complete\_rate | ordered | n\_unique | top\_counts |
| --- | --- | --- | --- | --- | --- |
| r1A\_STRESS | 451 | 0 | FALSE | 0 | VER: 0, ABO: 0, AVE: 0, BEL: 0 |
| r1B\_EFFORT | 451 | 0 | FALSE | 0 | VER: 0, SLI: 0, NEU: 0, MOS: 0 |
| r1C\_PROXIMITY | 451 | 0 | FALSE | 0 | POO: 0, FAI: 0, GOO: 0, VER: 0 |
| r1D\_CONTAM | 451 | 0 | FALSE | 0 | VER: 0, DIS: 0, UNS: 0, SAT: 0 |
| r1E\_SAFETY | 451 | 0 | FALSE | 0 | VER: 0, DIS: 0, UNS: 0, SAT: 0 |
| r1F\_COMFORT | 451 | 0 | FALSE | 0 | VER: 0, DIS: 0, UNS: 0, SAT: 0 |
| r1GA\_STRESS | 451 | 0 | FALSE | 0 | NOT: 0, SLI: 0, MOD: 0, IMP: 0 |
| r1GB\_EFFORT | 451 | 0 | FALSE | 0 | NOT: 0, SLI: 0, MOD: 0, IMP: 0 |
| r1GC\_PROXIMITY | 451 | 0 | FALSE | 0 | NOT: 0, SLI: 0, MOD: 0, IMP: 0 |
| r1GD\_CONTAM | 451 | 0 | FALSE | 0 | NOT: 0, SLI: 0, MOD: 0, IMP: 0 |
| r1GE\_SAFETY | 451 | 0 | FALSE | 0 | NOT: 0, SLI: 0, MOD: 0, IMP: 0 |
| r1GF\_COMFORT | 451 | 0 | FALSE | 0 | NOT: 0, SLI: 0, MOD: 0, IMP: 0 |

Variables regarding health information of respondents

Data set of feelings and emotions can be used to mapping and understanding travel behavior and would lead to a more sustainable transportation network. By trying to identify a correlation between feelings, emotions and modes of transportation, planners would be able to persuade people to use more active modes of travel or public transport will be resulted in making our transportation system more sustainable.

Data summary

|  |  |
| --- | --- |
| Name | Santiago\_FE |
| Number of rows | 451 |
| Number of columns | 22 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Column type frequency: |  |
| factor | 22 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Group variables | None |

**Variable type: factor**

| skim\_variable | n\_missing | complete\_rate | ordered | n\_unique | top\_counts |
| --- | --- | --- | --- | --- | --- |
| r2AA\_FREEDOM | 218 | 0.52 | FALSE | 8 | WAL: 96, CAR: 79, BIC: 43, MOT: 8 |
| r2AB\_UNSAFETY | 217 | 0.52 | FALSE | 8 | BUS: 94, MOT: 73, WAL: 22, BIC: 21 |
| r2AC\_FUNCTIONALITY | 196 | 0.57 | FALSE | 8 | CAR: 90, MET: 86, BIC: 26, MOT: 18 |
| r2AD\_ENJOYMENT | 212 | 0.53 | FALSE | 8 | BIC: 118, CAR: 42, WAL: 42, MOT: 15 |
| r2AE\_LOWCOST | 232 | 0.49 | FALSE | 8 | BIC: 91, WAL: 84, BUS: 15, MOT: 11 |
| r2AF\_POVERTY | 166 | 0.63 | FALSE | 8 | BUS: 139, WAL: 102, BIC: 13, COL: 10 |
| r2AG\_SAFETY | 142 | 0.69 | FALSE | 8 | CAR: 199, MET: 62, TAX: 16, WAL: 15 |
| r2AH\_WASTE\_OF\_TIME | 165 | 0.63 | FALSE | 8 | BUS: 222, MET: 13, CAR: 12, WAL: 12 |
| r2AI\_UNPUNCTUALITY | 139 | 0.69 | FALSE | 7 | BUS: 263, MET: 13, WAL: 11, CAR: 10 |
| r2AJ\_CONGEST | 233 | 0.48 | FALSE | 8 | BUS: 135, CAR: 52, MET: 16, TAX: 5 |
| r2AK\_EFFICIENCY | 196 | 0.57 | FALSE | 8 | MET: 94, CAR: 63, BIC: 37, MOT: 17 |
| r2AL\_LUXURY | 162 | 0.64 | FALSE | 7 | CAR: 200, TAX: 66, BIC: 8, MOT: 6 |
| r2AM\_ENVIRONMENT | 251 | 0.44 | FALSE | 8 | BIC: 121, WAL: 52, MET: 16, CAR: 4 |
| r2AN\_HEALTH | 259 | 0.43 | FALSE | 7 | WAL: 94, BIC: 76, CAR: 12, TAX: 3 |
| r2AO\_INTSOCI | 224 | 0.50 | FALSE | 8 | WAL: 84, BUS: 41, MET: 30, BIC: 27 |
| r2AP\_UNCOMFT | 221 | 0.51 | FALSE | 8 | BUS: 134, MET: 51, COL: 15, MOT: 14 |
| r2AQ\_HAPPINESS | 216 | 0.52 | FALSE | 8 | BIC: 77, WAL: 77, CAR: 65, MOT: 6 |
| r2AR\_STATUS | 173 | 0.62 | FALSE | 7 | CAR: 219, TAX: 28, BIC: 10, WAL: 10 |
| r2B\_DAILY\_ENJOY | 451 | 0.00 | FALSE | 0 | VER: 0, ABO: 0, AVE: 0, BEL: 0 |
| r2C\_IMP\_QUALITY | 451 | 0.00 | FALSE | 0 | VER: 0, ABO: 0, AVE: 0, BEL: 0 |
| r2D\_AFFECT | 38 | 0.92 | FALSE | 8 | ALL: 136, TRA: 89, CRO: 87, LAC: 38 |
| r2E\_FACILIT | 34 | 0.92 | FALSE | 8 | ALL: 164, RED: 82, LES: 66, BET: 36 |

Variables regarding feelings and emotions of respondents

The most important role of the transportation network and public modes of travel is to provide people with access to different destination in order to travel for business, reuniting with other people, doing grocery shopping and so on. This data set gives us a wide range of variables helpful for identifying people’s travel pattern and what level of importance do people assign. So it would be useful for transport-related experts to have an insight about people movement to provide network system with a an appropriate level of performance to increase the efficiency and promote urban transportation system.

Data summary

|  |  |
| --- | --- |
| Name | Santiago\_RPD |
| Number of rows | 451 |
| Number of columns | 23 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Column type frequency: |  |
| factor | 23 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Group variables | None |

**Variable type: factor**

| skim\_variable | n\_missing | complete\_rate | ordered | n\_unique | top\_counts |
| --- | --- | --- | --- | --- | --- |
| r3A\_ACCESS | 11 | 0.98 | FALSE | 5 | GOO: 186, FAI: 91, VER: 63, POO: 57 |
| r3B\_ACC\_EM | 18 | 0.96 | FALSE | 5 | GOO: 134, EXC: 108, VER: 83, FAI: 60 |
| r3CA\_FAM | 11 | 0.98 | FALSE | 5 | SOM: 117, OFT: 105, ALW: 100, NEV: 60 |
| r3CB\_REC | 15 | 0.97 | FALSE | 5 | SOM: 139, OFT: 103, ALW: 72, RAR: 65 |
| r3CC\_CUL | 14 | 0.97 | FALSE | 5 | SOM: 129, RAR: 123, NEV: 94, OFT: 65 |
| r3CD\_SPO | 15 | 0.97 | FALSE | 5 | SOM: 112, NEV: 106, RAR: 93, OFT: 75 |
| r3CE\_GROC | 14 | 0.97 | FALSE | 5 | OFT: 135, SOM: 112, ALW: 83, RAR: 65 |
| r3CF\_SOC | 13 | 0.97 | FALSE | 5 | OFT: 146, SOM: 107, ALW: 84, RAR: 55 |
| r3DA\_FAM | 45 | 0.90 | FALSE | 5 | MOD: 102, IMP: 85, NOT: 79, VER: 74 |
| r3DB\_REC | 47 | 0.90 | FALSE | 5 | MOD: 121, IMP: 91, SLI: 67, NOT: 64 |
| r3DC\_CUL | 52 | 0.88 | FALSE | 5 | MOD: 117, IMP: 87, SLI: 70, NOT: 67 |
| r3DD\_SPO | 50 | 0.89 | FALSE | 5 | MOD: 111, NOT: 85, IMP: 77, SLI: 65 |
| r3DE\_GROC | 46 | 0.90 | FALSE | 5 | MOD: 101, IMP: 91, NOT: 75, VER: 70 |
| r3DF\_SOC | 47 | 0.90 | FALSE | 5 | MOD: 124, IMP: 89, NOT: 64, SLI: 64 |
| r3E\_OPTIONS | 1 | 1.00 | FALSE | 5 | VER: 326, IMP: 75, MOD: 36, SLI: 8 |
| r3F\_ACCESS\_DEPENDENCY | 3 | 0.99 | FALSE | 5 | VER: 184, BEL: 128, AVE: 100, ABO: 21 |
| r3G\_QUALITY\_INCRS | 2 | 1.00 | FALSE | 5 | VER: 267, BEL: 97, AVE: 54, ABO: 18 |
| r3H\_ECON | 339 | 0.25 | FALSE | 8 | CAR: 30, ALL: 30, MET: 18, BUS: 18 |
| r3I\_NOECON | 261 | 0.42 | FALSE | 9 | TAX: 106, CAR: 39, MOT: 29, COL: 4 |
| r3JA\_OFIC | 20 | 0.96 | FALSE | 5 | VER: 195, IMP: 109, MOD: 82, SLI: 34 |
| r3JB\_MODES | 17 | 0.96 | FALSE | 5 | VER: 297, IMP: 91, MOD: 38, SLI: 6 |
| r3JC\_COMFORT | 14 | 0.97 | FALSE | 5 | VER: 300, IMP: 96, MOD: 34, SLI: 6 |
| r3JD\_OTHERS | 20 | 0.96 | FALSE | 5 | VER: 267, IMP: 82, MOD: 51, SLI: 16 |

Variables regarding decision-making and planning of respondents

Data summary

|  |  |
| --- | --- |
| Name | Santiago\_SI |
| Number of rows | 451 |
| Number of columns | 4 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Column type frequency: |  |
| factor | 4 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Group variables | None |

**Variable type: factor**

| skim\_variable | n\_missing | complete\_rate | ordered | n\_unique | top\_counts |
| --- | --- | --- | --- | --- | --- |
| r4A\_INTERACC | 13 | 0.97 | FALSE | 5 | GOO: 178, FAI: 102, POO: 85, VER: 53 |
| r4B\_PERSON | 12 | 0.97 | FALSE | 5 | MOD: 150, NOT: 88, IMP: 83, SLI: 69 |
| r4C\_DISCRIM | 4 | 0.99 | FALSE | 2 | NO: 338, YES: 109 |
| r4D\_MODE | 377 | 0.16 | FALSE | 7 | BUS: 33, MET: 15, CAR: 8, TAX: 7 |

Variables regarding social interactions of respondents

Data summary

|  |  |
| --- | --- |
| Name | Santiago\_NS |
| Number of rows | 451 |
| Number of columns | 10 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Column type frequency: |  |
| factor | 10 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Group variables | None |

**Variable type: factor**

| skim\_variable | n\_missing | complete\_rate | ordered | n\_unique | top\_counts |
| --- | --- | --- | --- | --- | --- |
| r5A\_CHANGE | 6 | 0.99 | FALSE | 2 | NO: 256, YES: 189 |
| r5B\_CHANGE\_MODE | 284 | 0.37 | FALSE | 8 | CAR: 79, MET: 34, TAX: 27, COL: 13 |
| r5C\_SUST | 7 | 0.98 | FALSE | 5 | POO: 189, FAI: 97, GOO: 86, VER: 42 |
| r5D\_IMP\_SUST | 6 | 0.99 | FALSE | 5 | VER: 195, IMP: 115, MOD: 86, NOT: 26 |
| r5E\_PAYMENT | 6 | 0.99 | FALSE | 2 | YES: 228, NO: 217 |
| r5F\_PAYMENTS | 236 | 0.48 | FALSE | 2 | 5-1: 144, 15-: 71, 30%: 0 |
| r5GA\_TREE | 16 | 0.96 | FALSE | 5 | VER: 236, IMP: 91, MOD: 74, NOT: 19 |
| r5GB\_PARK | 12 | 0.97 | FALSE | 5 | VER: 254, IMP: 106, MOD: 58, SLI: 11 |
| r5GC\_MODE | 11 | 0.98 | FALSE | 5 | VER: 236, IMP: 105, MOD: 63, SLI: 25 |
| r5GD\_MODE | 11 | 0.98 | FALSE | 5 | VER: 258, IMP: 102, MOD: 48, SLI: 22 |

Variables regarding perspectives about nature and sustainability of respondents

Data summary

|  |  |
| --- | --- |
| Name | Santiago\_IS |
| Number of rows | 451 |
| Number of columns | 9 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Column type frequency: |  |
| factor | 9 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Group variables | None |

**Variable type: factor**

| skim\_variable | n\_missing | complete\_rate | ordered | n\_unique | top\_counts |
| --- | --- | --- | --- | --- | --- |
| r6A\_SHIFT | 11 | 0.98 | FALSE | 2 | YES: 247, NO: 193 |
| r6B\_QUALITY\_SHIFT | 198 | 0.56 | FALSE | 5 | GOO: 107, FAI: 61, VER: 38, POO: 34 |
| r6CA\_WAITING | 41 | 0.91 | FALSE | 5 | GOO: 124, POO: 101, FAI: 94, VER: 61 |
| r6CB\_TIME\_SHIFT | 102 | 0.77 | FALSE | 5 | GOO: 126, FAI: 77, POO: 62, VER: 59 |
| r6CC\_TOTALTIME | 28 | 0.94 | FALSE | 5 | GOO: 138, POO: 113, FAI: 75, VER: 54 |
| r6D\_DIFFICULTY | 76 | 0.83 | FALSE | 7 | All: 107, Shi: 89, Shi: 87, Bad: 33 |
| r6E\_TOOL | 8 | 0.98 | FALSE | 2 | YES: 372, NO: 71 |
| r6F\_INFO | 15 | 0.97 | FALSE | 5 | GOO: 153, VER: 118, FAI: 63, EXC: 63 |
| r6G\_IMP\_INFO | 10 | 0.98 | FALSE | 5 | VER: 198, IMP: 122, MOD: 68, SLI: 33 |

Variables regarding information and telecommunications and mode shifting of respondents

Built environment data set gives intuition about how people evaluate facilities and infrastructures such as parking sites, quality of highways, spaces for pedestrian, condition of bus stops, quality of cycle ways and so on. Decision makers would use this information in different contexts such as planning for arrangement and appearance of the various physical elements in a transportation system. Some of them may focus on enriching the environment in a way that they can encourage people to use more active modes of travel especially walking to reach a destination. Some of them would contribute to climate change background and study human activity to identify how transportation system, constructions, land-use and so on could be destructive due to high green house gas emissions.

Data summary

|  |  |
| --- | --- |
| Name | Santiago\_BE |
| Number of rows | 451 |
| Number of columns | 22 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Column type frequency: |  |
| factor | 22 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Group variables | None |

**Variable type: factor**

| skim\_variable | n\_missing | complete\_rate | ordered | n\_unique | top\_counts |
| --- | --- | --- | --- | --- | --- |
| r7AA\_AUTOSPACE | 10 | 0.98 | FALSE | 5 | GOO: 127, VER: 117, FAI: 72, EXC: 67 |
| r7AB\_PARKING\_NUMB | 10 | 0.98 | FALSE | 5 | GOO: 119, FAI: 96, VER: 88, POO: 85 |
| r7AC\_QHIWAY | 11 | 0.98 | FALSE | 5 | VER: 142, GOO: 141, FAI: 67, EXC: 49 |
| r7AD\_PEDESTRN | 10 | 0.98 | FALSE | 5 | GOO: 141, VER: 102, FAI: 82, EXC: 68 |
| r7AE\_QSIDEWA | 9 | 0.98 | FALSE | 5 | GOO: 119, FAI: 110, VER: 99, POO: 67 |
| r7AF\_CLEAN\_STOP | 9 | 0.98 | FALSE | 5 | POO: 129, FAI: 108, GOO: 102, VER: 67 |
| r7AG\_SEAT | 9 | 0.98 | FALSE | 5 | POO: 142, FAI: 122, GOO: 94, VER: 53 |
| r7AH\_CLIMA | 10 | 0.98 | FALSE | 5 | POO: 156, FAI: 139, GOO: 88, VER: 36 |
| r7AI\_CICLEWA\_NUMB | 9 | 0.98 | FALSE | 5 | POO: 189, FAI: 96, GOO: 84, VER: 37 |
| r7AJ\_CICLEWA\_Q | 9 | 0.98 | FALSE | 5 | POO: 171, FAI: 96, GOO: 96, VER: 44 |
| r7AK\_BICSHARE | 9 | 0.98 | FALSE | 5 | POO: 177, GOO: 100, FAI: 69, EXC: 49 |
| r7BA\_IMPAUTOSPACE | 12 | 0.97 | FALSE | 5 | VER: 140, MOD: 104, IMP: 95, SLI: 56 |
| r7BB\_IMPPARKING\_NUMB | 12 | 0.97 | FALSE | 5 | VER: 152, MOD: 102, IMP: 91, SLI: 51 |
| r7BC\_IMPQHIWAY | 11 | 0.98 | FALSE | 5 | VER: 214, IMP: 100, MOD: 82, NOT: 23 |
| r7BD\_IMPPEDESTRN | 11 | 0.98 | FALSE | 5 | VER: 278, IMP: 103, MOD: 41, NOT: 10 |
| r7BE\_IMPQSIDEWA | 11 | 0.98 | FALSE | 5 | VER: 297, IMP: 86, MOD: 35, SLI: 12 |
| r7BF\_IMPCLEAN\_STOP | 11 | 0.98 | FALSE | 5 | VER: 286, IMP: 92, MOD: 39, SLI: 13 |
| r7BG\_IMPSEAT | 11 | 0.98 | FALSE | 5 | VER: 258, IMP: 92, MOD: 56, SLI: 19 |
| r7BH\_IMPCLIMA | 11 | 0.98 | FALSE | 5 | VER: 296, IMP: 83, MOD: 34, SLI: 14 |
| r7BI\_IMPCICLEWA\_NUMB | 11 | 0.98 | FALSE | 5 | VER: 296, IMP: 76, MOD: 42, SLI: 19 |
| r7BJ\_IMPCICLEWA\_Q | 11 | 0.98 | FALSE | 5 | VER: 308, IMP: 67, MOD: 44, NOT: 11 |
| r7BK\_IMPBICSHARE | 12 | 0.97 | FALSE | 5 | VER: 259, IMP: 78, MOD: 66, SLI: 22 |

Variables regarding the built environment at the place of residence of respondents

Data summary

|  |  |
| --- | --- |
| Name | Santiago\_TW |
| Number of rows | 451 |
| Number of columns | 7 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Column type frequency: |  |
| factor | 7 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Group variables | None |

**Variable type: factor**

| skim\_variable | n\_missing | complete\_rate | ordered | n\_unique | top\_counts |
| --- | --- | --- | --- | --- | --- |
| r8A\_ACCESSJOB | 15 | 0.97 | FALSE | 5 | NEU: 124, NO : 123, MIN: 66, MAJ: 64 |
| r8B\_JOBOPP | 11 | 0.98 | FALSE | 5 | GOO: 169, POO: 86, FAI: 85, VER: 64 |
| r8C\_ACC\_COM | 15 | 0.97 | FALSE | 5 | EXC: 184, VER: 109, GOO: 93, FAI: 27 |
| r8D\_EMPLSATISF | 37 | 0.92 | FALSE | 5 | VER: 135, EXT: 130, MOD: 116, SLI: 20 |
| r8E\_TIMECOMMUT | 10 | 0.98 | FALSE | 4 | 1h : 133, 40-: 113, 20-: 103, 0-2: 92 |
| r8F\_SCHEDULE | 171 | 0.62 | FALSE | 6 | 7:0: 168, Oth: 47, 9:0: 39, 18:: 14 |
| r8G\_SPENDING | 7 | 0.98 | FALSE | 4 | 35.: 199, Les: 166, 75.: 46, Mor: 33 |

Variables regarding the commuting behavior of respondents

## Experimental Design, Materials and Methods

The study is based on a paper-based survey conducted face-to-face in Santiago in 2016. The survey collected information on a wide range of travel-related issues (socio-demographics, health-related, perceptions and travel behavior, travel choices and planning, social interaction factors, built environment, among others). The data collection considered a quota-sampling method based on the information from Pre-Census of 2012, and in total, 451 persons validly completed the survey. This paper considers the first part of the survey, with information about the basic socio-economic data, travel choices, activities and commuting information, and the question related to the levels of stress experienced in while traveling.

## Acknowledgements

## References