## PRS includes 4 factors

1. FAscination,
2. Being Away,
3. Extent Coherence,
4. Extent Scope

Questions from the survey related to PRS:

|  |  |  |
| --- | --- | --- |
| **PRS factor** | **variable** | **full question** |
| 1 | LQUAL1 | This place is fascinating |
| 1 | LQUAL2 | In this place my attention is drawn to many interesting things |
| 1 | LQUAL3 | It's hard to get bored in this place |
| 2 | LQUAL4 | This place is a refuge from annoyance |
| 2 | LQUAL5 | In this place I can get away from things that normally occupy my attention |
| 2 | LQUAL6 | In this place I can stop thinking about the things I still have to do |
| 3 | LQUAL7 | There is a clear order of things in this place |
| 3 | LQUAL8 | In this place it is easy to see how things are organised |
| 3 | LQUAL9 | In this place everything seems to have its right place |
| 4 | LQUAL10 | This place is big enough to allow exploration in many directions |
| 4 | LQUAL11 | In this place, there are few boundaries that restrict my movements |

## GIS variables for modeling

RL\_NDVI + RL\_NOISE + HM\_NOISE + DISTKM + JNYTIME + LCARTIF +

LCFOREST + HETER + VIS5K + OVDIST + STRIMP123 + STRIMP999

|  |  |
| --- | --- |
| **Acronym** | **Explanation** |
| LCARTIF | proportion of artificial surfaces within 250 m buffer |
| LCFOREST | proportion of forest within 250 m buffer |
| HETER | land cover heterogeneity in 250 m buffer |
| OVDIST | distance to the nearest public transport stop |
| VIS5K | percentage of visible area within a radius of 5 km |
| RL\_NDVI | mean NDVI in 250 m buffer around RL |
| RL\_NOISE | mean street noise in 250 m buffer around RL |
| HM\_NOISE | person’s noise exposure at home (facade) |
| DISTKM | Euclidean distance between home and RL |
| JNYTIME | travel time from home to RL (as indicated in the survey) |
| STRIMP123 | length of roads with high traffic intensity |
| STRIMP999 | length of other roads (low traffic intensity) |

## Mediators

FEELNAT values: [1-7]

LNOISE values: [1-5]

SENS = aggregated( LOC\_... values: [1-5]) > using mean (?)

|  |  |  |
| --- | --- | --- |
| FEELNAT | How true is the following statement for the place you indicated on the map? I have the feeling of being in nature at this place | factor |
| LNOISE | How would you describe the noise environment at the site in the map in general? | factor |
| LOC\_SENS | At this location, I noticed… Sensations, like wind in my hair, rain on my face, earth under my feet | factor |
| LOC\_SOUN | At this location, I noticed… Sounds, like the chirping of birds or the rush of water | factor |
| LOC\_SCEN | At this location, I noticed… Scents, for example flowers or the smell of earth | factor |
| LOC\_VISE | At this location, I noticed… Visual elements: Colors, shapes, textures, or patterns of light and shadow | factor |
| LOC\_VEGE | At this location, I noticed… Vegetation and its change (e.g., flowers in bloom; colorful leaves on trees) | factor |
| LOC\_FAUN | At this location, I noticed… Wild animals, in their habitat | factor |

## Database Cleaning Criteria

I have not run this!!!! Therefore, the data I send you include NA – Lukas mentioned performing some NA imputation.

# 1. FEELNATURE and NOISEANNOY\_1 and HM/RL\_NDVI and HM/RL \_NOISE exclude #NULL!

# 2. ACTIVITY exclude NA and 6 (no outdoor activity in the past 4 weeks)

# 3. HEADPHNE exclude 2 and 3 (wearing headphones)

# 4. MAPDATA exclude 0 (not mapped RL)

# 5. DISTKM excludes values above of the 90th percentile (extremely large values) and

# 6. DURATION excludes values above of the 90th percentile (extremely large values)

# 7. JOURNEY TIME excludes values above of the 99th percentile (extremely large values)

# 8. HM\_NOISE exclude NA

# \_\_Database Cleaning

df\_survey <- df\_survey %>%

# filter out ACTIVITY exclude 6 (no outdoor activity in the past 4 weeks)

filter(!is.na(REC\_ACT)) %>%

filter(!grepl('I have never been outside', REC\_ACT)) %>%

# filter out headphones

filter(HEADPHNE == "No") %>%

# filter out outliers by distance and duration (keep NA) using 0.9 quantile

filter(DISTKM <= quantile(df\_survey$DISTKM, 0.9)) %>%

filter(REC\_DUR <= quantile(df\_survey$REC\_DUR, 0.9, na.rm=T) | is.na(REC\_DUR)) %>% # allow NA

filter(JNYTIME <= quantile(df\_survey$JNYTIME, 0.99, na.rm=T) | is.na(JNYTIME)) %>%

filter(!is.na(HM\_NOISE)) # do not allow NA

## Variables of interest

A wide range...

c("ILCODE",

"HM\_NOISELVL", "HM\_NDVI", "HM\_NOISE", "RL\_NDVI", "RL\_NOISE",

"DISTKM", "DIFNDVI", "DIFNOISE",

"SPREG", "MAPDATA", „LANG", "AGE", "SEX",

"EDQUAL", "EMP",

"RESREG", "RESTYPE", "APTFLOOR", "RESOWN", "RESTERR", "RESGARD",

"RESTOR1", "RESTOR2", "RESTOR3", "RESTOR4", "RESTOR5",

"RESTOR6", "RESTOR7", "RESTOR8", "RESTOR9", "RESTOR10",

"OSRELAX", "REC\_ACT", "CHOSELOC",

"WHYLOC1", "WHYLOC2", "WHYLOC3", "WHYLOC4",

"WHYLOC5", "WHYLOC6", "WHYLOC7", "WHYLOC8",

"LRELAX1", "LRELAX2", "LRELAX3", "LRELAX4", "LRELAX5", "LRELAX6", "LRELAX7",

"REC\_DUR", "JNYTIME", "LOCFRQ",

"FEELNAT",

"LOC\_SENS", "LOC\_SOUN", "LOC\_SCEN", "LOC\_VISE", "LOC\_VEGE", "LOC\_FAUN",

"HEADPHNE",

"LDOMAUD1", "LDOMAUD2", "LDOMAUD3", "LDOMAUD4",

"LSOUNDS1", "LSOUNDS2", "LSOUNDS3", "LSOUNDS4", "LSOUNDS5",

"LSOUNDS6", "LSOUNDS7", "LSOUNDS8", "LSOUNDS9",

"LNOISE",

"LSANNOY1", "LSANNOY2", "LSANNOY3", "LSANNOY4",

"LSANNOY5", "LSANNOY6", "LSANNOY7",

"LQUAL1", "LQUAL2", "LQUAL3", "LQUAL4", "LQUAL5", "LQUAL6",

"LQUAL7", "LQUAL8", "LQUAL9", "LQUAL10", "LQUAL11",

"LIFESAT", "HEALTH",

"AUDSENS", "HEARPROB", "STRTOL", "PSTRESS", "WKSTRESS",

"FREETIME", "GRNTIME",

"NATURE1", "NATURE2", "NATURE3", "NATURE4", "NATURE5",

"LCWATER", "LCFOREST", "LCARTIF", "LCCULTIV", "LCGRASS", "LCDOMLBL",

"LKSHR", "RIVR", "STRIMP123", "STRIMP999", "HIKPTH",

"TPI", "OVDIST", "VIS5K",

"HETER")