

CLHLS Data Analysis by R

Your Name

2025-02-21

1 CLHLS

R CLHLS

1.1

DVN/WBO7LK_2020

SAS

Vintage Car

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# SPSS
raw_data <- read_sav("C:/Users/asus/Desktop/test/CLHLS/Analysis-0214/clhls_2018_15874.sav")

# f103a4:f103m4 f103a3:f103m3 labelled
raw_data <- raw_data %>%
  mutate(
    across(f103a4:f103m4, ~ as.numeric(haven::zap_labels(.))),
    across(f103a3:f103m3, ~ as.numeric(haven::zap_labels(.)))
  )

# last_alive_child_age
selected_data <- raw_data %>%
  mutate(
    # SHEALTH
    SHEALTH = b12,
```

```

#      ADL
ADL = rowSums(
  cbind(
    ifelse(e1b == 1, e1, ifelse(e1b == 2, e1 * 2, ifelse(e1b == 3, e1 * 3, 0))),
    ifelse(e2b == 1, e2, ifelse(e2b == 2, e2 * 2, ifelse(e2b == 3, e2 * 3, 0))),
    ifelse(e3b == 1, e3, ifelse(e3b == 2, e3 * 2, ifelse(e3b == 3, e3 * 3, 0))),
    ifelse(e4b == 1, e4, ifelse(e4b == 2, e4 * 2, ifelse(e4b == 3, e4 * 3, 0))),
    ifelse(e5b == 1, e5, ifelse(e5b == 2, e5 * 2, ifelse(e5b == 3, e5 * 3, 0))),
    ifelse(e6b == 1, e6, ifelse(e6b == 2, e6 * 2, ifelse(e6b == 3, e6 * 3, 0)))
  ), na.rm = TRUE
),

#      ADL2
ADL2 = ifelse(rowSums(cbind(e1, e2, e3, e4, e5, e6) > 1, na.rm = TRUE) > 0, 1, 0),

#      IADL
IADL = rowSums(select(., e7, e8, e9, e10, e11, e12, e13, e14), na.rm = TRUE),

#      IADL2
IADL2 = ifelse(rowSums(select(., e7, e8, e9, e10, e11, e12, e13, e14) > 1, na.rm = TRUE)

#
economic_support = rowSums(
  cbind(
    ifelse(f12a == 99998, 10000, ifelse(f12a %in% c(88888, 99999), 0, f12a)),
    ifelse(f12b == 99998, 10000, ifelse(f12b %in% c(88888, 99999), 0, f12b)),
    ifelse(f12c == 99998, 10000, ifelse(f12c %in% c(88888, 99999), 0, f12c))
  ), na.rm = TRUE
),

#
residence = a51,
living = a52,
visit_fren = ifelse(rowSums(select(., starts_with("f103") & ends_with("5"))) == 1, na.rm =

#
emotion_support = ifelse(rowSums(select(., starts_with("f103") & ends_with("6"))) == 1, na.rm =

#
age = trueage,
gender = a1,
education = f1,

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    job_type = f2,
    marriage_status = ifelse(f41 == 1, 1, 0),
    hukou_type = hukou,
    social_insurance = ifelse(nf64a == 0 | f64b == 1 | f64c == 1 | f64i == 1, 1, 0),
    medical_insurance = ifelse(f64d == 1 | f64e == 1 | f64g == 1 | f64h == 1, 1, 0),

    #
    chronic_disease = ifelse(rowSums(select(., starts_with("g15") & ends_with("1"))) == 1, na

    #
    smoking = g151,
    drinking = g161,
    exercise = ifelse(d91 == 1 | d92 == 1, 1, 2),

    #
    last_alive_child_age = apply(
      select(., f103a4:f103m4) * (select(., f103a3:f103m3) == 1), 1,
      function(x) max(x, na.rm = TRUE)
    ),
    child_elderly_status = ifelse(last_alive_child_age > 60, 1, 0),

    #   care_support
    care_support = ifelse(residence == 1 | visit_fren == 1, 1, 0)
  ) %>%
  select(
    SHEALTH, ADL, ADL2, IADL, IADL2, economic_support, residence, living, visit_fren, emotion
    f10, age, gender, education, job_type, marriage_status, hukou_type,
    social_insurance, medical_insurance, chronic_disease, smoking, drinking, exercise,
    child_elderly_status, care_support,
    f103a3:f103m3
  )

#
# print(head(selected_data$last_alive_child_age))
print(head(selected_data))

```

```
# A tibble: 6 x 110
```

	SHEALTH	ADL	ADL2	IADL	IADL2	economic_support	residence	living	visit_fren
	<dbl+lbl>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl+lbl>	<dbl>	<dbl>
1	8 [not a~	0	1	24	1	0	1 [with ~	2	1
2	8 [not a~	0	1	24	1	0	1 [with ~	2	1
3	3 [so so]	0	1	24	1	2500	1 [with ~	2	1

```

4 3 [so so]      0      1      24      1              0 1 [with ~      2          1
5 3 [so so]      0      1      24      1              0 1 [with ~      3          1
6 2 [good]       0      1      24      1             18000 1 [with ~      1          1
# i 101 more variables: emotion_support <dbl>, f10 <dbl+lbl>, age <dbl>,
#   gender <dbl+lbl>, education <dbl+lbl>, job_type <dbl+lbl>,
#   marriage_status <dbl>, hukou_type <dbl+lbl>, social_insurance <dbl>,
#   medical_insurance <dbl>, chronic_disease <dbl>, smoking <dbl+lbl>,
#   drinking <dbl+lbl>, exercise <dbl>, child_elderly_status <dbl>,
#   care_support <dbl>, f103a3 <dbl>, f103a4 <dbl>, f103a5 <dbl>, f103a6 <dbl>,
#   f103a7 <dbl>, f103b1 <dbl>, f103b2 <dbl>, f103b3 <dbl>, f103b4 <dbl>, ...

```

2.1

```

#           Excel
write_xlsx(selected_data, "C:/Users/asus/Desktop/test/CLHLS/CLHLS /CLHLS /clhls_2018_sort022

```