Script for Table1

2024-10-07

```r
#libraries
library(here)
```

here() starts at C:/Users/temoo/OneDrive/Desktop/Uni/Year MPH 1/Year 2/Stat computation/Armed

```r
library(table1)
```

Attaching package: 'table1'

The following objects are masked from 'package:base':

    units, units<-

```r
library(dplyr)
```

Attaching package: 'dplyr'

The following objects are masked from 'package:stats':

    filter, lag

The following objects are masked from 'package:base':

    intersect, setdiff, setequal, union

```
library(ggplot2)
```

```
#loading merged dataset and its script
source(here("R", "merged_dataset.R"))
```

```
[1] "Columns with NA values:"
     gdp1000       popdens         urban     male_edu          temp rainfall1000
          62            20            20            20            20           20
      MarMor       InfMort  NeonatalMort    Under5Mort       Drought   Earthquake
         426            20            20            20          3132         3132
# A tibble: 0 x 2
# i 2 variables: ISO <chr>, count <int>
```

Creating a dataset that only has baseline data

```
table1_data <- filter(finaldata, Year =="2000")
```

Relabelling 0s and 1s

```
#relabelling 0s and 1s for variables
table1_data$conflict <- factor(table1_data$conflict, levels = c(0, 1), labels = c("No", "Yes"
table1_data$Drought <- factor(table1_data$Drought, levels = c(0, 1), labels = c("No", "Yes")
table1_data$Earthquake <- factor(table1_data$Earthquake, levels = c(0, 1), labels = c("No", "
table1_data$OECD <- factor(table1_data$OECD, levels = c(0, 1), labels = c("No", "Yes"))
table1_data$OECD2023 <- factor(table1_data$OECD2023, levels = c(0, 1), labels = c("No", "Yes"
```

Relabelling variables

```
label(table1_data$OECD) <- "OECD Member"
label(table1_data$popdens) <- "Population Density"
label(table1_data$temp) <- "Temperature (C)"
label(table1_data$rainfall1000) <- "Rainfall (mm/yr)"
label(table1_data$gdp1000) <- "GDP per capita"
label(table1_data$total_deaths) <- "Total Deaths"
label(table1_data$MarMor) <- "Maternal Mortality"
label(table1_data$InfMort) <- "Infant Mortality"
label(table1_data$Under5Mort) <- "Under 5 Mortality"
label(table1_data$NeonatalMort) <- "Neonatal Mortality"
label(table1_data$urban) <- "Urban Residence"
label(table1_data$male_edu) <- "Male Education"
```

Creating Table 1

```
table1(~ gdp1000 + OECD + OECD2023 + popdens + urban + agedep + male_edu + temp + rainfall100
       caption = "Summary Table by Presence of Conflict, Year 2000", render.continuous=c(.="N
```

Get nicer `table1` LaTeX output by simply installing the `kableExtra` package

	No	Yes	Overall
	(N=147)	(N=39)	(N=186)
GDP per capita			
Median [Min, Max]	2.19 [0.137, 48.7]	0.558 [0.123, 4.80]	1.77 [0.123, 48.7]
Missing	3 (2.0%)	2 (5.1%)	5 (2.7%)
OECD Member			
No	118 (80.3%)	38 (97.4%)	156 (83.9%)
Yes	29 (19.7%)	1 (2.6%)	30 (16.1%)
OECD2023			
No	113 (76.9%)	38 (97.4%)	151 (81.2%)
Yes	34 (23.1%)	1 (2.6%)	35 (18.8%)
Population Density			
Median [Min, Max]	27.3 [0, 99.8]	21.3 [0, 71.7]	25.4 [0, 99.8]
Missing	1 (0.7%)	0 (0%)	1 (0.5%)
Urban Residence			
Median [Min, Max]	28.9 [0.106, 91.6]	24.1 [3.80, 49.3]	28.0 [0.106, 91.6]
Missing	1 (0.7%)	0 (0%)	1 (0.5%)
agedep			
Median [Min, Max]	60.2 [30.0, 108]	84.4 [44.2, 111]	63.5 [30.0, 111]
Male Education			
Median [Min, Max]	7.91 [1.07, 14.0]	4.94 [1.69, 11.8]	7.14 [1.07, 14.0]
Missing	1 (0.7%)	0 (0%)	1 (0.5%)
Temperature (C)			
Median [Min, Max]	21.0 [-1.21, 28.6]	24.0 [5.09, 28.5]	21.4 [-1.21, 28.6]
Missing	1 (0.7%)	0 (0%)	1 (0.5%)
Rainfall (mm/yr)			
Median [Min, Max]	0.998 [0.0480, 4.71]	1.07 [0.191, 3.03]	1.00 [0.0480, 4.71]
Missing	1 (0.7%)	0 (0%)	1 (0.5%)
Total Deaths			
Median [Min, Max]	0 [0, 19.0]	542 [25.0, 30800]	0 [0, 30800]
Drought			
No	128 (87.1%)	36 (92.3%)	164 (88.2%)
Yes	19 (12.9%)	3 (7.7%)	22 (11.8%)

	No	Yes	Overall
Earthquake			
No	134 (91.2%)	34 (87.2%)	168 (90.3%)
Yes	13 (8.8%)	5 (12.8%)	18 (9.7%)
Maternal Mortality			
Median [Min, Max]	57.0 [3.00, 1730]	553 [13.0, 2480]	77.0 [3.00, 2480]
Missing	3 (2.0%)	0 (0%)	3 (1.6%)
Infant Mortality			
Median [Min, Max]	21.0 [3.00, 112]	66.7 [10.9, 138]	27.4 [3.00, 138]
Missing	1 (0.7%)	0 (0%)	1 (0.5%)
Neonatal Mortality			
Median [Min, Max]	12.9 [1.60, 56.0]	36.6 [7.80, 60.9]	16.8 [1.60, 60.9]
Missing	1 (0.7%)	0 (0%)	1 (0.5%)
Under 5 Mortality			
Median [Min, Max]	24.8 [3.90, 225]	98.5 [12.6, 225]	31.5 [3.90, 225]
Missing	1 (0.7%)	0 (0%)	1 (0.5%)

Creating a figure that shows an increase in maternal mortality from Years 2000-2017

Want to see yearly differences as well

Subsetting data to only include Years 2000-2017, and creating a new variable of maternal mortality differences

```
diff_summary <- finaldata %>%
  filter(Year %in% c(2000, 2017)) %>%
  group_by(ISO) %>%
  summarise(change = first(MarMor[Year == 2017], default = NA) -
              first(MarMor[Year == 2000], default = NA),
            .groups = 'drop')

# Identify ISOs with positive changes
positive_isos <- diff_summary %>%
  filter(change > 0) %>%
  pull(ISO)

# Filter finaldata to keep only the positive ISOs
filtered_data <- finaldata %>%
  filter(ISO %in% positive_isos)
```

```
# Create the plot
ggplot(filtered_data, aes(x = Year, y = MarMor, group = ISO, color = ISO)) +
  geom_line(alpha = 0.7) +
  labs(y = "Maternal Mortality", x = "Year", color = "Country (ISO)") +
  theme_minimal() +
  scale_color_discrete(name = "ISO Code")
```

Warning: Removed 26 rows containing missing values or values outside the scale range
(`geom_line()`).