PKO Health Tables

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```
setwd("~/Desktop/pko_health_21")

library(haven)
library(modelsummary)
library(tidyverse)
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.3.0 --

## v ggplot2 3.3.2     v purrr   0.3.4
## v tibble  3.0.6     v dplyr   1.0.4
## v tidyr   1.1.2     v stringr 1.4.0
## v readr   1.3.1     v forcats 0.5.0

## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
library(Zelig)
```

```
## Loading required package: survival

##
## Attaching package: 'Zelig'

## The following object is masked from 'package:purrr':
##
##     reduce

## The following object is masked from 'package:ggplot2':
##
##     stat

## The following object is masked from 'package:modelsummary':
##
##     Median
```

```r
# Total violence
m.out <- read_dta("data/matched_data.dta")
m.out$idps_per100000 <- m.out$idps_per1000 / 100
m.out$year <- as.factor(m.out$year)
no_outliers_matched <- filter(m.out, deathstotal_and_osv_10000 < 2.5 )
additional_row <- tibble::tribble(~name, ~model1, ~model2, ~model3, ~model4,
                                  "Outliers Omitted: ", "No", "No", "Yes", "Yes")
m.out$osv_per1000 <- m.out$osv / 1000
m.weights <- as.vector(m.out$weights)
no.weights <- as.vector(no_outliers_matched$weights)

cm <- c(
    'pkoyearsany' = 'Years with PKO',
    'deathstotal_and_osv_10000' = 'Total Violence',
    'osv_per1000' = 'OSV',
    'deathstotal_new' = 'Battle-Related Deaths',
    'pkoyearsany:deathstotal_and_osv_10000' = 'Total Violence x Years with PKO',
    'osv_per1000:pkoyearsany' = 'OSV x Years with PKO',
    'deathstotal_new:pkoyearsany' = 'Battle-Related Deaths x Years with PKO',
    'priorpko' = "Previous PKO",
    'idps_per1000' = 'Internally Displaced Persons',
    'helog_knn' = 'Health Expend. (log)',
    'hdi_knn' = 'HDI',
    'civilwarborder' = 'Boarding Civil Wars',
    'urbangrowth_knn' = 'Urban Growth',
    'gini_knn' = 'Gini',
    'tropical' = 'Tropical',
    'xpolity_knn' = 'x-Polity',
    'ef_knn' = 'Ethnic Fractionalization',
    'year2005' = '2005',
    'year2010' = '2010',
    'year2015' = '2015',
    '(Intercept)' = 'Constant'
    )



gof_custom <- modelsummary::gof_map
gof_custom$omit[gof_custom$raw == 'AIC'] <- TRUE
gof_custom$omit[gof_custom$raw == 'BIC'] <- TRUE
gof_custom$omit[gof_custom$raw == 'logLik'] <- TRUE


table_1 = list(
    `(21)` = zelig(dale ~ pkoyearsany + deathstotal_and_osv_10000 +
        idps_per100000 + helog_knn + hdi_knn + civilwarborder +
        urbangrowth_knn + gini_knn + tropical + xpolity_knn + ef_knn +
        priorpko + year, data = m.out, weights = m.weights,
        model = "ls", cite = FALSE) %>%
    from_zelig_model(),

    `(22)` = zelig(dale ~ pkoyearsany + deathstotal_and_osv_10000 +
        idps_per100000 + pkoyearsany:deathstotal_and_osv_10000 + helog_knn +
```

```
        hdi_knn + civilwarborder + urbangrowth_knn + gini_knn + tropical +
        xpolity_knn + ef_knn + priorpko + year, data = m.out,
        weights = m.weights, model = "ls", cite = FALSE) %>%
    from_zelig_model(),

    `(23)` = zelig(dale ~ deathstotal_and_osv_10000 + idps_per100000 +
        helog_knn + hdi_knn + civilwarborder + urbangrowth_knn + gini_knn +
        tropical + xpolity_knn + ef_knn + priorpko + year +
        pkoyearsany, data = no_outliers_matched, weights = no.weights,
        model = "ls", cite = FALSE) %>%
    from_zelig_model(),

    `(24)` = zelig(dale ~ pkoyearsany + pkoyearsany:deathstotal_and_osv_10000 +
        deathstotal_and_osv_10000 + idps_per100000 + helog_knn + hdi_knn +
        civilwarborder + urbangrowth_knn + gini_knn + tropical + xpolity_knn +
        ef_knn + priorpko + year, data = no_outliers_matched,
        weights = no.weights, model = "ls", cite = FALSE) %>%
    from_zelig_model()
)
```

```
## Warning: `tbl_df()` was deprecated in dplyr 1.0.0.
## Please use `tibble::as_tibble()` instead.
```

```
## Warning: `group_by_()` was deprecated in dplyr 0.7.0.
## Please use `group_by()` instead.
## See vignette('programming') for more help
```

```
modelsummary(table_1, stars = T,
             title = "TABLE 2: CEM regressions - Total fatalities",
             add_rows = additional_row, coef_map = cm,
             gof_omit = "AIC|Dev|DF|Sigma|Stat|P|Log")
```

Table 1: TABLE 2: CEM regressions – Total fatalities

	(21)	(22)	(23)	(24)
Years with PKO	0.277***	0.233**	0.281***	0.195*
	(0.093)	(0.100)	(0.093)	(0.100)
Total Violence	-0.350	-0.384	-1.880*	-3.036***
	(0.271)	(0.272)	(1.003)	(1.128)
Total Violence x Years with PKO		0.381		0.758**
		(0.306)		(0.342)
Previous PKO	-1.202**	-1.193**	-1.175*	-1.144*
	(0.605)	(0.605)	(0.605)	(0.603)
Health Expend. (log)	1.745***	1.742***	1.746***	1.736***
	(0.210)	(0.210)	(0.210)	(0.210)
HDI	14.283***	14.467***	13.890***	13.982***
	(1.718)	(1.723)	(1.734)	(1.729)
Boarding Civil Wars	0.970	1.015	0.909	0.959
	(0.944)	(0.944)	(0.944)	(0.941)
Urban Growth	-0.520	-0.504	-0.592	-0.608
	(0.592)	(0.592)	(0.593)	(0.592)
Gini	-0.042	-0.040	-0.042	-0.038
	(0.026)	(0.026)	(0.026)	(0.026)
Tropical	-1.514***	-1.521***	-1.580***	-1.648***
	(0.493)	(0.493)	(0.495)	(0.495)
x-Polity	0.165***	0.161***	0.167***	0.162***
	(0.055)	(0.055)	(0.055)	(0.055)
Ethnic Fractionalization	-4.743***	-4.778***	-4.557***	-4.501***
	(0.829)	(0.829)	(0.836)	(0.834)
2005	2.295***	2.300***	2.263***	2.274***
	(0.570)	(0.570)	(0.572)	(0.571)
2010	4.001***	4.011***	3.964***	3.972***
	(0.577)	(0.577)	(0.577)	(0.576)
2015	2.837***	2.847***	2.779***	2.774***
	(0.578)	(0.578)	(0.579)	(0.578)
Constant	45.295***	45.129***	45.634***	45.545***
	(1.575)	(1.580)	(1.588)	(1.584)
Num.Obs.	652	652	650	650
R2	0.680	0.681	0.671	0.673
R2 Adj.	0.673	0.673	0.663	0.665
BIC	4361.4	4366.3	4351.4	4352.8
F	90.131	84.668	86.085	81.508
Outliers Omitted:	No	No	Yes	Yes

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$