Brassiolo

Impact calculation

Este documento replica la Tabla 2 y Tabla 4 del artículo de Pablo Brassiolo: Domestic Violence and Divorce Law: When Divorce Threats Become Credible.

NOTA: Algunas diferencias pueden ser encontradas en las estimaciones y errores estándares de algunas regresiones, en particular para la **tabla 1**. Sin embargo, estas variaciones son pequeñas.

Resumen

En el año 2016 el Dr. Pablo Brassiolo, economista en CAF-Banco de Desarrollo de América Latina, escribió un documento que se enfoca en un problema que ha estado presente en todo el mundo con el paso del tiempo, la violencia doméstica. El Dr. se pregunta qué tanto puede afectar una ley o proceso legal de un divorcio en la violencia doméstica.

En el año 2005, España reformó su legislación en temas de divorcio con el objetivo de disminuir las barreras del mismo. Esta reforma constó en dos partes principales, la primera fue eliminar el periodo de separación de 1 año obligatorio que una pareja debía tener antes de poder seguir con el divorcio. La segunda, se permite el divorcio unilateral, es decir, no es obligatorio que ambas partes estén de acuerdo. Además, se cambió el periodo de espera que una pareja tenía que esperar para separarse de 1 año a 3 meses posteriores de la fecha de matrimonio y la implementación de las custodias compartidas para los hijos. Estas modificaciones hicieron que el proceso de divorcio o separación se redujera en tiempos y costos tanto económicos como emocionales.

El Dr. Pablo se basó en esta reforma para poder comprobar cómo una legislación familiar en el tema de separación o divorcios puede influir en los índices de violencia doméstica. Lo primero que se encontró fue que la reforma española influyó de inmediato en la tasa de separación ya que en su primer año el número de divorcios aumentó en un 170%. Con base en esto, el estudio delinea un modelo simple de negociación dentro del matrimonio para conocer cómo puede afectar un divorcio sencillo en la incidencia de un conflicto conyugal. Como principal predicción se tiene que una reducción a los costos del divorcio mejora la posición de negociación de las personas abusadas (esposa o esposo) al aumentar su punto de amenaza (el nivel mínimo de utilidad requerido del matrimonio para continuar casado) y que esto conduce a una menor nivel de equilibrio de violencia entre parejas. Lo segundo que encontró es que la reforma redujo el costo de terminar una relación para las parejas que estaban legalmente casadas cuando la ley entró en vigencia, pero no para parejas no casadas, por lo que el trabajo empírico sigue una metodología de diferencias en diferencias.

Los hallazgos apuntan a una disminución en la violencia doméstica después de la reforma en España. El análisis reveló una disminución de la violencia doméstica entre los matrimonio respecto a las parejas no casadas de entre un 27% y un 36%. El acceso a un divorcio más sencillo ha reducido la violencia doméstica en los matrimonio ya que la amenaza de separación es más creíble con un proceso más sencillo. Sin embargo, se encontró que las mujeres con hijos pequeños fueron menos afectadas por la reforma que aquellas sin hijos.

Pregunta a resolver

El Dr. Pablo Brassiolo se hace la pregunta sobre cómo se ve afectada la violencia doméstica con las políticas familiares, específicamente aquellas sobre la separación o divorcio.

La importancia de la pregunta

Como se mencionó anteriormente, el documento aborda un problema social que ha estado afectando a todo el mundo que es la violencia doméstica. Estadísticas sobre los países europeos muestran que entre el 20 y 25% de las mujeres han sido víctimas de abuso físico por lo menos una vez en su vida adulta y que alrededor del 10% ha sufrido abuso sexual por medio de la fuerza. En Estados Unidos, la Encuesta Nacional de Violencia en contra de las Mujeres (National Violence against Women Survey) muestra que 1 de 3 mujeres ha sido violada o abusada físicamente en su vida adulta. La mayoría de los casos de violencia en contra de mujeres son cometidos por sus parejas.

Base de datos usada

El estudio utiliza una base de datos basada en una encuesta sobre violencia en contra de las mujeres en España. Esta base de datos cuenta con datos de antes y después de la reforma aplicada a la ley de divorcio o separación.

$$DV_{igt} = \beta_0 + \beta_1 Married + \beta_2 (Married_g \times Post_t) + \sum_t \lambda_t Year_t + X\gamma + \mu_{igt}$$

Se utilizó la ecuación anterior para los modelos realizados, donde DVigt es una medida de violencia doméstica para el individuo i, grupo marital g y año t; Marriedg es el indicador del grupo de tratamiento, Postt es el indicador para el periodo posterior a la reforma y B2 el estimador de diferencias en diferencias.

Replique tabla 2

La tabla 2 muestra los resultados de la estimación de la ecuación antes mencionada por mínimos cuadrados ordinarios cuando la variable dependiente es la dummy para los reportes de abuso hechos por uno mismo. La columna 1 presenta los resultados de una muestra sin controles más allá del indicador de tratamiento y las dummies. El coeficiente sugiere una disminución del 0.75 puntos porcentuales en el abuso reportado por uno mismo para el grupo de tratamiento en comparación al grupo de control después de la reforma.

La columna 2 muestra controles individuales como son edad, educación, estado civil, presencia y número de hijos, estatus migratorio y religión mientras que la columna 3 también incluye la región. Una vez controladas estas características individuales el coeficiente sigue siendo significativo, un divorcio más sencillo reduce el abuso en 0.65 puntos porcentuales, el 29% de la media muestral. La columna 4, muestra los resultados con la característica de la educación de la pareja y el estado laboral, con estos rubros la violencia disminuye en 0.59 puntos porcentuales.

La columna 5 muestra los resultados de cómo cambia la violencia doméstica con un cambio en la posición negociadora (esposa que amenaza con el divorcio), los resultados toman en cuenta el grupo de tratamiento es de mujeres que estaban casadas cuando se aprobó la ley, el resultado equivale a un 36% de reducción de la media muestral. Por último, la columna 6 muestra una prueba placebo en la que la variable dependiente es igual a 1 si la persona sufrió de abuso en los últimos 12 meses. Al ser en un periodo que precede a la reforma, por ende no debería de verse afectado y los resultados así lo demuestran. El coeficiente es insignificante estadísticamente.

Replique tabla 4

Durante el documento se considera que las mujeres con hijos pequeños se ven menos afectadas por la reforma que aquellas sin hijos o con hijos mayores. Por lo mismo, la tabla 4 muestra esta afirmación, se consideraron la presencia de hijos menores de 18 años que viven en el hogar vs aquellas mujeres sin hijos o con hijos mayores de 18 años.

En la tabla se muestra en el grupo A aquellas mujeres con hijos menores y en el grupo B las que no tienen o son mayores de 18 años. Los resultados muestran que los efectos de la reforma favorecen al grupo sin hijos o que son mayores. En este sentido, no tener hijos hace que aprovechar la legislación sea más sencilla.

Para poder entender mejor, se analiza lo que pasaba antes de la reforma, las mujeres con hijos pequeños reportaban un mayor nivel de violencia que aquellas que sin hijos, aproximadamente del 2%. Al presentar un mayor nivel de violencia antes de la reforma se esperaba que, si bien disminuyó, no lo hiciera tanto en comparación con el grupo de control, mujeres sin hijos o con hijos mayores.

Conclusión

El estudio tuvo como objetivo ver en qué medida un cambio en las legislaciones de ámbito familiar, como una ley de divorcio, puede generar un cambio en los niveles de violencia doméstica. Para lo anterior, se tomó como referencia la reforma a la ley de divorcio que sucedió en España en 2005. Misma que elimina el periodo de 1 año de separación previo al divircio y permite un divorcio no pactado, es decir, una sola persona tiene que estar de acuerdo en lugar de las dos partes. Lo que provocó que los tiempos se redujeran.

Utilizando una metodología de diferencias en diferencias, se comprobó que efectivamente el poder tener un divorcio más sencillo disminuye los niveles de violencia doméstica que sufren las mujeres. Sin embargo, existen grupos de mujeres que se ven más beneficiadas que otras. Se encontró que el grupo de mujeres con hijos menores a los 18 años se ven menos afectadas por esta reforma que aquellas mujeres que no tienen hijos o que son mayores.

Código de las tablas

```
# Load libraries and set the working directory
library(dplyr)
library(tidyverse)
library(haven)
library(estimatr)
library(lmtest)
library(sandwich)

robust_lm <- function(lm) {
    # Returns a similar value as reg, robust option in STATA
    return(coeftest(lm, vcov = vcovHC(lm, type="HC1")))
}</pre>
```

Table 4. Impact on Self-Reported Abuse

Crea las variables dummy para las regresiones.

Regresiones

```
# Regression 1
blm <- ("ipv_ly ~ treatedpost + treated + year2 + year3") # Base linear model
lm1 <- lm(blm, data[data$agegr <= 5,])
summary(lm1)</pre>
```

```
##
## Call:
## lm(formula = blm, data = data[data$agegr <= 5, ])</pre>
## Residuals:
     Min
             1Q Median
                           3Q
## -2.911 -2.845 -2.411 -1.436 98.875
## Coefficients:
              Estimate Std. Error t value Pr(>|t|)
                                  7.598 3.04e-14 ***
## (Intercept) 1.12452 0.14799
## treatedpost -0.74578
                          0.23758 -3.139 0.0017 **
                          0.15755 10.920 < 2e-16 ***
## treated
              1.72049
## year2
               0.06636
                          0.14865
                                  0.446 0.6553
                          0.20762 1.501 0.1334
## year3
              0.31164
## Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' 1
## Residual standard error: 14.68 on 69890 degrees of freedom
## Multiple R-squared: 0.002189,
                                  Adjusted R-squared: 0.002132
## F-statistic: 38.33 on 4 and 69890 DF, p-value: < 2.2e-16
```

```
coeftest(lm1, vcov = vcovHC(lm1, type = "HC1"))
##
## t test of coefficients:
##
##
               Estimate Std. Error t value Pr(>|t|)
## (Intercept) 1.124516 0.115883 9.7039 < 2.2e-16 ***
## treated
              0.066364 \qquad 0.151753 \quad 0.4373 \ 0.6618815
## year2
## year3
              ## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
# Regression 2
controlv1 <- "civils1 + civils2 + civils3 + civils4 + civils5"</pre>
controlv1 <- paste(controlv1, "+ age1 + age2 + age3 + age4 + age5")</pre>
controlv1 <- paste(controlv1, "+ edu1 + edu2 + edu3 + edu4")</pre>
controlv1 <- paste(controlv1, "+ employed + unemp + housewife + aporta")</pre>
controlv1 <- paste(controlv1, "+ chi04h + chi418h + nchildren + immig")</pre>
controlv1 <- paste(controlv1, "+ religion1 + religion2 + religion3 + religion4 + religion5")</pre>
lm2 <- lm(paste("ipv_ly ~ treatedpost + treated + year2 + year3 +", controlv1),</pre>
         data[data$agegr <= 5,])</pre>
summary(1m2)
##
## Call:
## lm(formula = paste("ipv_ly ~ treatedpost + treated + year2 + year3 +",
      controlv1), data = data[data$agegr <= 5, ])</pre>
##
## Residuals:
##
               1Q Median
                              3Q
      Min
                                    Max
## -18.231 -2.504 -1.912 -1.145 102.132
##
## Coefficients: (4 not defined because of singularities)
             Estimate Std. Error t value Pr(>|t|)
##
## (Intercept) -0.75659
                       0.47143 -1.605 0.10852
                         0.23616 -2.757 0.00583 **
## treatedpost -0.65109
## treated
              3.45708
                         0.58439
                                 5.916 3.32e-09 ***
## year2
              0.06633
                         0.14754
                                 0.450 0.65303
## year3
             0.09167
                       0.20796
                                 0.441 0.65936
## civils1
             1.78687
                       0.30085
                                 5.939 2.87e-09 ***
## civils2
                         0.60024 -1.643 0.10030
            -0.98646
            11.51431
## civils3
                         0.69995
                                 16.450 < 2e-16 ***
            7.86758
                         0.49719
                                 15.824 < 2e-16 ***
## civils4
## civils5
                             NA
                                    NA
                                             NΑ
                   NA
                                 1.731 0.08350 .
## age1
             0.48735
                         0.28158
              0.09725
                         0.26703
                                  0.364 0.71570
## age2
                         0.24080
                                 0.785 0.43269
## age3
              0.18893
                         0.19478
                                  1.696 0.08996 .
## age4
              0.33028
## age5
                                     NA
                   NA
                              NA
                                              NA
```

```
## edu1
               0.24398
                           0.19631
                                     1.243 0.21395
               0.45217
                           0.18083
## edu2
                                     2.501 0.01240 *
## edu3
               -0.01200
                           0.18419
                                    -0.065 0.94805
## edu4
                     NA
                                NA
                                       NA
                                                 NΑ
## employed
                0.25916
                           0.18617
                                     1.392 0.16390
                          0.25322
                                     4.914 8.94e-07 ***
## unemp
                1.24433
## housewife
                                     2.279 0.02270 *
               0.40537
                           0.17791
## aporta
               0.59465
                          0.18175
                                     3.272 0.00107 **
## chi04h
               0.23858
                          0.21546
                                     1.107 0.26816
## chi418h
               0.02419
                           0.17260
                                     0.140 0.88856
## nchildren
                0.37214
                           0.05302
                                    7.018 2.27e-12 ***
                           0.44882
                                     4.018 5.88e-05 ***
## immig
               1.80332
## religion1
               -1.14300
                          0.31379
                                    -3.643 0.00027 ***
## religion2
              -0.82482
                           0.30427
                                    -2.711 0.00671 **
## religion3
               -0.70335
                           0.35563
                                    -1.978 0.04796 *
## religion4
               -0.18851
                           0.46661
                                    -0.404 0.68622
## religion5
                     NA
                                NA
                                       NA
                                                 NA
## ---
## Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' 1
## Residual standard error: 14.52 on 69810 degrees of freedom
     (57 observations deleted due to missingness)
## Multiple R-squared: 0.02461,
                                    Adjusted R-squared: 0.02424
## F-statistic: 65.24 on 27 and 69810 DF, p-value: < 2.2e-16
```

robust_lm(lm2)

```
##
## t test of coefficients:
##
##
                Estimate Std. Error t value Pr(>|t|)
## (Intercept) -0.756593
                          0.496408 -1.5241 0.127479
## treatedpost -0.651089
                          0.211846 -3.0734 0.002117 **
## treated
                          0.763482 4.5280 5.963e-06 ***
               3.457079
## year2
                          0.150732 0.4400 0.659905
               0.066329
## year3
               0.091668
                          0.166625
                                    0.5501 0.582222
## civils1
               1.786874
                          0.247788 7.2113 5.597e-13 ***
## civils2
               -0.986457
                          0.762082 -1.2944 0.195523
                          1.197801 9.6129 < 2.2e-16 ***
## civils3
               11.514306
## civils4
               7.867577
                          0.870820 9.0347 < 2.2e-16 ***
## age1
               0.487346
                          0.282142 1.7273 0.084117 .
## age2
               0.097254
                          0.279867 0.3475 0.728216
                          0.260618 0.7249 0.468500
## age3
               0.188928
## age4
                          0.209027 1.5801 0.114093
               0.330280
## edu1
               0.243977
                          0.202379 1.2055
                                           0.227997
## edu2
                          0.185294 2.4403
               0.452172
                                           0.014678 *
## edu3
               -0.012001
                          0.176317 -0.0681
                                           0.945736
## employed
                          0.166388 1.5576 0.119338
               0.259162
## unemp
               1.244334
                          0.269899 4.6104 4.027e-06 ***
                          0.158966 2.5500 0.010773 *
## housewife
               0.405369
## aporta
               0.594655
                          0.204171 2.9125
                                            0.003586 **
## chi04h
               0.238582
                          0.238589 1.0000
                                           0.317328
## chi418h
                          0.194295 0.1245 0.900931
               0.024187
                          0.057374 6.4863 8.855e-11 ***
## nchildren
               0.372143
```

```
## immig
             1.803320
                        0.628001 2.8715 0.004086 **
            -1.143000 0.364435 -3.1364 0.001711 **
## religion1
## religion2
             0.401874 -1.7502 0.080092 .
## religion3
             -0.703350
## religion4
             ## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
# Regression 3
controlv2 <- ""
for (i in seq(2:19)) {
 controlv2 <- paste(controlv2, paste0("ccaa", i), sep = " + ")</pre>
controlv2 <- paste(controlv2, "urban", sep = " + ")</pre>
controlv2
## [1] " + ccaa1 + ccaa2 + ccaa3 + ccaa4 + ccaa5 + ccaa6 + ccaa7 + ccaa8 + ccaa9 + ccaa10 + ccaa11 + cc
lm3 <- lm(paste(blm, controlv1, controlv2, sep = " + "),</pre>
         data[data$agegr <= 5,])</pre>
summary(1m3)
##
## Call:
## lm(formula = paste(blm, controlv1, controlv2, sep = " + "), data = data[data$agegr <=
##
      5, ])
##
## Residuals:
      Min
              1Q Median
## -18.140 -2.565 -1.887 -1.110 101.653
## Coefficients: (5 not defined because of singularities)
               Estimate Std. Error t value Pr(>|t|)
## (Intercept) -1.2706024 0.6109259 -2.080 0.037548 *
## treated
              3.4502355 0.5843692 5.904 3.56e-09 ***
## year2
              0.0819413 0.1475647
                                   0.555 0.578698
## year3
              0.0006559 0.2097027
                                   0.003 0.997504
## civils1
             1.7803997 0.3012475 5.910 3.44e-09 ***
## civils2
             -0.9537569 0.6003022 -1.589 0.112111
## civils3
            11.5013256 0.7000395 16.430 < 2e-16 ***
              7.8322596 0.4973369 15.748 < 2e-16 ***
## civils4
                     NA
## civils5
                               NA
                                      NA
                                               NA
## age1
              0.4524965 0.2833783
                                   1.597 0.110316
              0.0630256 0.2681341
                                   0.235 0.814169
## age2
## age3
              0.1540791
                        0.2412998
                                   0.639 0.523126
              0.2910229 0.1949918
                                   1.492 0.135576
## age4
## age5
                     NA
                               NA
                                      NA
## edu1
                                   1.646 0.099668 .
              0.3259286 0.1979536
## edu2
              0.5049624 0.1813296
                                   2.785 0.005358 **
## edu3
              0.0201794 0.1843042
                                   0.109 0.912815
## edu4
                    NA
                               NA
                                      NA
                                              NA
                                   1.432 0.152247
## employed
             0.2667267 0.1863065
```

```
4.848 1.25e-06 ***
## unemp
              1.2284881 0.2534228
            0.3827578 0.1782826
## housewife
                                   2.147 0.031803 *
## aporta
             0.5967726 0.1818394
                                   3.282 0.001032 **
## chi04h
              0.2287747 0.2155272
                                   1.061 0.288482
## chi418h
              0.0108545 0.1726517
                                   0.063 0.949871
## nchildren
            0.3572055 0.0533433 6.696 2.15e-11 ***
## immig
             1.7997949 0.4494199 4.005 6.22e-05 ***
             -1.1036081 0.3152692 -3.501 0.000465 ***
## religion1
             ## religion2
## religion3
             -0.6897220 0.3556524 -1.939 0.052467 .
## religion4
             -0.1731551
                        0.4683330 -0.370 0.711587
## religion5
                    NA
                              NA
                                      NA
                                              NA
                                  1.502 0.133054
## ccaa1
              0.5640847
                       0.3755098
## ccaa2
             0.4432916 0.4426520
                                  1.001 0.316615
## ccaa3
             -0.2059804 0.4714310 -0.437 0.662166
## ccaa4
             -0.1943708 0.4968027
                                  -0.391 0.695618
## ccaa5
             0.2968374 0.4552981
                                  0.652 0.514427
## ccaa6
             -0.4109656   0.4831066   -0.851   0.394954
## ccaa7
             ## ccaa8
              0.0072687 0.4269452 0.017 0.986417
## ccaa9
             ## ccaa10
             0.2094696 0.4015304 0.522 0.601896
## ccaa11
             ## ccaa12
             0.1189900 0.4120762 0.289 0.772768
## ccaa13
             0.4011689 0.3712228 1.081 0.279848
## ccaa14
             -0.0550823 0.4763485 -0.116 0.907943
## ccaa15
             -0.5351301 0.4874206 -1.098 0.272260
## ccaa16
             -0.1790207 0.4339197 -0.413 0.679926
## ccaa17
             -0.2664405 0.5582710 -0.477 0.633178
## ccaa18
                    NA
                              NA
                                      NA
                                              NA
              0.4793910 0.1399548
## urban
                                   3.425 0.000614 ***
## ---
## Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' 1
## Residual standard error: 14.51 on 69792 degrees of freedom
    (57 observations deleted due to missingness)
## Multiple R-squared: 0.02524,
                                Adjusted R-squared: 0.02461
## F-statistic: 40.16 on 45 and 69792 DF, p-value: < 2.2e-16
# Regression 4
controlv3 <- "edu_h2 + edu_h3 + edu_h4 + part_h + fullt_h"</pre>
lm4 <- lm(paste(blm, controlv1, controlv2, controlv3, sep = " + "),</pre>
           data[data$agegr <= 5, ])</pre>
summary(lm4)
##
## lm(formula = paste(blm, controlv1, controlv2, controlv3, sep = " + "),
      data = data[data$agegr <= 5, ])</pre>
##
## Residuals:
##
      Min
              1Q Median
                             3Q
## -15.669 -2.721 -2.017 -1.307 100.899
##
```

```
## Coefficients: (5 not defined because of singularities)
##
                 Estimate Std. Error t value Pr(>|t|)
                            1.239028
## (Intercept)
                1.921985
                                        1.551 0.120859
## treatedpost -0.599305
                            0.323839
                                       -1.851 0.064228
## treated
                0.725865
                            0.818615
                                        0.887 0.375245
## year2
                -0.007067
                            0.167015
                                       -0.042 0.966250
## year3
                -0.127955
                            0.307469
                                       -0.416 0.677299
## civils1
                0.627202
                            1.059851
                                        0.592 0.553998
## civils2
                -0.204465
                            1.296200
                                       -0.158 0.874661
## civils3
                9.040934
                            1.548020
                                        5.840 5.24e-09
## civils4
                7.577420
                            1.317302
                                        5.752 8.85e-09
## civils5
                       NA
                                   NA
                                           NA
                                                     NA
## age1
                -0.490893
                            0.358243
                                       -1.370 0.170605
                                       -0.655 0.512262
## age2
                -0.210388
                            0.321044
                0.307221
                            0.288389
                                        1.065 0.286746
## age3
## age4
                 0.570569
                            0.231399
                                        2.466 0.013676 *
## age5
                                           NA
                                                     NA
                       NA
                                   NA
## edu1
                -0.490377
                            0.277634
                                       -1.766 0.077356
                                        0.500 0.616988
## edu2
                0.116073
                            0.232087
## edu3
                -0.070134
                            0.219321
                                       -0.320 0.749139
## edu4
                       NA
                                  NA
                                           NΑ
                                                     NΑ
                 0.419977
                            0.232252
                                        1.808 0.070568
## employed
                                        3.376 0.000736 ***
## unemp
                 1.016181
                            0.300986
                 0.348159
                            0.224379
                                        1.552 0.120750
## housewife
                                        2.802 0.005083 **
## aporta
                 0.628651
                            0.224373
## chi04h
                 0.157031
                            0.225578
                                        0.696 0.486350
## chi418h
                            0.185788
                                        0.150 0.880732
                 0.027876
## nchildren
                 0.372142
                            0.063864
                                        5.827 5.67e-09 ***
                                        4.597 4.30e-06 ***
## immig
                 2.337271
                            0.508431
## religion1
                -1.167183
                            0.359347
                                       -3.248 0.001163 **
## religion2
                -0.797534
                            0.346525
                                       -2.302 0.021366 *
                -0.601607
## religion3
                            0.405593
                                       -1.483 0.138006
## religion4
                 0.410675
                            0.536821
                                        0.765 0.444267
## religion5
                                  NA
                                           NA
                                                     NA
                       NA
## ccaa1
                 0.561215
                            0.433147
                                        1.296 0.195095
## ccaa2
                            0.508592
                                        0.540 0.589116
                 0.274701
## ccaa3
                -0.272940
                            0.543789
                                       -0.502 0.615725
## ccaa4
                 0.106345
                            0.571156
                                        0.186 0.852294
## ccaa5
                 0.142318
                            0.526726
                                        0.270 0.787013
## ccaa6
                                       -0.868 0.385569
                -0.484382
                            0.558244
## ccaa7
                0.177377
                            0.516512
                                        0.343 0.731289
## ccaa8
                0.039988
                            0.491820
                                        0.081 0.935198
## ccaa9
                -0.344354
                            0.446311
                                       -0.772 0.440381
## ccaa10
                0.124543
                            0.462356
                                        0.269 0.787648
## ccaa11
                0.097543
                            0.551982
                                        0.177 0.859734
## ccaa12
                            0.475324
                                        0.375 0.707307
                0.178473
## ccaa13
                0.545711
                            0.428605
                                        1.273 0.202944
## ccaa14
                0.014320
                            0.543049
                                        0.026 0.978962
## ccaa15
                -0.843623
                            0.562957
                                       -1.499 0.133995
## ccaa16
                -0.059040
                            0.498259
                                       -0.118 0.905678
                                       -0.415 0.678439
## ccaa17
                -0.266324
                            0.642369
## ccaa18
                       NA
                                   NA
                                           NA
                            0.157005
## urban
                0.548727
                                        3.495 0.000475 ***
## edu h2
                -0.356373
                            0.219101
                                      -1.627 0.103844
```

```
## edu h3
             -0.890341
                        0.234752 -3.793 0.000149 ***
             ## edu h4
                                 0.098 0.922231
## part h
             0.038986
                        0.399343
## fullt_h
             -0.550169
                        0.176173 -3.123 0.001792 **
## Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' 1
## Residual standard error: 14.47 on 54706 degrees of freedom
    (15138 observations deleted due to missingness)
## Multiple R-squared: 0.009085, Adjusted R-squared: 0.00818
## F-statistic: 10.03 on 50 and 54706 DF, p-value: < 2.2e-16
# Regression 5
data$barg <- case_when(data$marital == 5</pre>
                     | (data\$marital == 6 \& data\$q29 == 1)
                     | (data$marital == 4 & data$cohab == 0) ~ 0, T ~ 1)
lm5 <- lm(paste(blm, controlv1, controlv2, sep = " + "),</pre>
         data[data$agegr <= 5 & data$barg == 1, ])</pre>
summary(lm5)
##
## Call:
## lm(formula = paste(blm, controlv1, controlv2, sep = " + "), data = data[data$agegr <=
      5 & data$barg == 1, ])
##
##
## Residuals:
      Min
              10 Median
                             3Q
                                    Max
## -10.969 -2.458 -1.814 -1.110 101.305
##
## Coefficients: (6 not defined because of singularities)
              Estimate Std. Error t value Pr(>|t|)
## (Intercept) -0.998200 0.578638 -1.725 0.084517 .
                        0.221583 -3.097 0.001954 **
## treatedpost -0.686292
## treated
             1.633312 0.571485
                                 2.858 0.004264 **
## year2
              ## year3
              0.023366 0.195702 0.119 0.904962
## civils1
             1.817709 0.283097 6.421 1.36e-10 ***
             0.643633 0.583994 1.102 0.270412
## civils2
## civils3
                    NA
                              NA
                                     NΑ
## civils4
             6.685272
                        0.473760 14.111 < 2e-16 ***
## civils5
                    NA
                              NA
                                     NA
## age1
             -0.277524
                        0.254452 -1.091 0.275420
## age2
## age3
              0.089678
                        0.228869 0.392 0.695185
                        0.184085
## age4
              0.240238
                                 1.305 0.191884
## age5
                    NA
                              NA
                                     NA
                                              NA
## edu1
              0.326649
                        0.187417
                                  1.743 0.081356
## edu2
              0.461219
                        0.171584
                                 2.688 0.007190 **
## edu3
              0.147824
                         0.174246
                                   0.848 0.396238
## edu4
                    NA
                              NA
                                     NΑ
                                              NA
## employed
              0.387431
                        0.175496
                                   2.208 0.027273 *
## unemp
              1.133796   0.239715   4.730   2.25e-06 ***
## housewife
              0.321191
                        0.167543 1.917 0.055233 .
                        0.174033 1.756 0.079138 .
## aporta
              0.305557
```

```
## chi04h
          0.127090
                    ## chi418h
           ## nchildren 0.360583 0.050443 7.148 8.87e-13 ***
           1.862414   0.434005   4.291   1.78e-05 ***
## immig
## religion1
          ## religion2
          -0.721971   0.289690   -2.492   0.012697 *
## religion3
          0.016460
                    0.445174 0.037 0.970505
## religion4
## religion5
                NA
                        NA
                               NA
                                      NA
                    0.355480 1.325 0.185314
## ccaa1
            0.470862
## ccaa2
           0.341181
                    ## ccaa3
           ## ccaa4
           ## ccaa5
                    0.432668 1.016 0.309747
           0.439487
## ccaa6
           ## ccaa7
           ## ccaa8
           ## ccaa9
           ## ccaa10
           0.030987 0.455476 0.068 0.945761
## ccaa11
## ccaa12
           0.273252 0.389698 0.701 0.483187
## ccaa13
          0.407033 0.351568 1.158 0.246964
          0.049931 0.449553 0.111 0.911563
## ccaa14
          ## ccaa15
## ccaa16
           0.007692 0.410280 0.019 0.985042
## ccaa17
          -0.330650 0.525767 -0.629 0.529422
                NA
## ccaa18
                       NA
                              NA
                                      NA
           0.453655
                   0.131676
                           3.445 0.000571 ***
## urban
## ---
## Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 13.51 on 67850 degrees of freedom
   (55 observations deleted due to missingness)
## Multiple R-squared: 0.007536,
                           Adjusted R-squared: 0.006892
## F-statistic: 11.71 on 44 and 67850 DF, p-value: < 2.2e-16
# Regression 6
lm6 <- lm(paste("placebo ~ treatedpost + treated + year2 + year3", controlv1, controlv2, sep = " + "),</pre>
       data[data$agegr <= 5,])</pre>
summary(lm6)
##
## lm(formula = paste("placebo ~ treatedpost + treated + year2 + year3",
     controlv1, controlv2, sep = " + "), data = data[data$agegr <=</pre>
##
##
     5, ])
##
## Residuals:
                        3Q
     Min
            1Q Median
## -15.921 -2.035 -1.227 -0.572 100.893
## Coefficients: (5 not defined because of singularities)
          Estimate Std. Error t value Pr(>|t|)
## (Intercept) 2.01390
                    0.54347 3.706 0.000211 ***
```

```
## treatedpost 0.07826
                            0.21016
                                      0.372 0.709609
## treated
               -0.81939
                            0.51985
                                     -1.576 0.114978
## year2
               -0.37226
                            0.13127
                                     -2.836 0.004572 **
## year3
               -0.99839
                            0.18655
                                     -5.352 8.73e-08 ***
## civils1
               -0.97652
                            0.26798
                                     -3.644 0.000269 ***
## civils2
               -0.38458
                            0.53402
                                     -0.720 0.471426
## civils3
                9.77886
                            0.62274
                                     15.703 < 2e-16 ***
                            0.44242
## civils4
                9.19032
                                     20.773 < 2e-16 ***
## civils5
                                 NA
                                          NA
                                                   NA
                      NΑ
## age1
               -0.27061
                            0.25209
                                     -1.073 0.283058
## age2
               -0.21703
                            0.23853
                                      -0.910 0.362885
                0.20525
## age3
                            0.21466
                                      0.956 0.338990
## age4
                0.48754
                            0.17346
                                      2.811 0.004945 **
## age5
                      NA
                                 NA
                                          NA
                                                   NA
## edu1
                            0.17610
                                      2.181 0.029214 *
                0.38400
## edu2
                0.23693
                            0.16131
                                      1.469 0.141898
                0.06366
## edu3
                            0.16395
                                      0.388 0.697832
## edu4
                                          NA
                      NA
                                 NA
                                                   NA
                0.35094
                            0.16574
## employed
                                      2.117 0.034221 *
## unemp
                0.22005
                            0.22544
                                      0.976 0.329019
## housewife
               -0.30735
                            0.15860
                                     -1.938 0.052638
## aporta
                0.55374
                                      3.423 0.000619 ***
                            0.16176
## chi04h
                                     -2.142 0.032196 *
               -0.41069
                            0.19173
## chi418h
               -0.10069
                            0.15359
                                      -0.656 0.512089
## nchildren
                0.47034
                            0.04745
                                      9.912 < 2e-16 ***
## immig
                0.02003
                            0.39980
                                      0.050 0.960043
## religion1
               -1.12260
                            0.28046
                                     -4.003 6.27e-05 ***
## religion2
               -0.67210
                            0.27093
                                     -2.481 0.013115 *
                                     -1.739 0.082101 .
## religion3
               -0.55008
                            0.31638
## religion4
                0.04594
                            0.41662
                                      0.110 0.912188
## religion5
                      NA
                                 NA
                                          NA
## ccaa1
                0.76223
                            0.33405
                                      2.282 0.022503 *
## ccaa2
                0.26325
                            0.39378
                                      0.669 0.503804
## ccaa3
                1.51760
                            0.41938
                                      3.619 0.000296 ***
## ccaa4
                0.05276
                            0.44195
                                      0.119 0.904969
                                      0.668 0.503934
## ccaa5
                0.27069
                            0.40503
## ccaa6
                0.23604
                            0.42976
                                      0.549 0.582844
## ccaa7
                            0.40191
                                      1.196 0.231568
                0.48083
## ccaa8
                0.50495
                            0.37980
                                      1.330 0.183683
## ccaa9
                0.54956
                            0.34385
                                      1.598 0.109990
## ccaa10
                0.39777
                            0.35720
                                      1.114 0.265452
## ccaa11
                            0.43004
                                      1.755 0.079337
                0.75454
## ccaa12
                0.70710
                            0.36658
                                      1.929 0.053742 .
## ccaa13
                            0.33023
                                      1.698 0.089505
                0.56075
## ccaa14
                0.27655
                            0.42375
                                      0.653 0.514003
## ccaa15
                            0.43360
                                      0.386 0.699844
                0.16717
## ccaa16
                0.24681
                            0.38601
                                      0.639 0.522568
## ccaa17
                0.60930
                            0.49663
                                      1.227 0.219873
## ccaa18
                      NA
                                 NA
                                         NA
                                                   NA
## urban
                0.12761
                            0.12450
                                      1.025 0.305401
##
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 12.91 on 69792 degrees of freedom
```

```
(57 observations deleted due to missingness)
## Multiple R-squared: 0.03037, Adjusted R-squared: 0.02975
## F-statistic: 48.59 on 45 and 69792 DF, p-value: < 2.2e-16
# Create table 2
table2 <- matrix(nrow = 12, ncol = 6)
lms <- list(lm1, lm2, lm3, lm4, lm5, lm6) # List of linear models
individual_controls <- c("No", "Yes", "Yes", "Yes", "Yes", "Yes")</pre>
year_dummies <- c("Yes", "Yes", "Yes", "Yes", "Yes", "Yes")
region_controls <- c("No", "No", "Yes", "Yes", "Yes", "Yes")</pre>
partner_controls <- c("No", "No", "No", "Yes", "No", "No")</pre>
for (i in seq(length(lms))) {
  lm_i <- lms[[i]] # Linear model at index i</pre>
  lm_i_se <- sqrt(diag(vcov(lm_i)))</pre>
  married_x_post <- lm_i$coefficients["treatedpost"][[1]] # Select the coefficient
  mxp_se <- lm_i_se["treatedpost"][[1]] # Get the standard error of treatedpost</pre>
  married <- lm_i$coefficients["treated"][[1]] # Select treated coefficient
  married_se <- lm_i_se["treated"][[1]] # Get the standard error for treated
  ic <- individual_controls[i]</pre>
  yd <- year dummies[i]</pre>
  rc <- region_controls[i]</pre>
  pc <- partner controls[i]</pre>
  r2 <- summary(lm_i)$r.squared
  n <- (lm_i$model %>% dim())[1] # Get the number of observations
  rmse <- lm_i$residuals ** 2 %>% mean() %>% sqrt() # calculate the RMSE
  depvar_mean <- lm_i$model[, 1] %>% mean() # Get the mean from the dependent variable
  col_i <- c(married_x_post, mxp_se, married, married_se,</pre>
             ic, yd, rc, pc,
             r2, n, rmse, depvar_mean) # Combine all the variables into a single vector
  table2[, i] <- col_i # Define the i column with the col_i
# Set the row names
row.names(table2) <- c("Married x Post (coefficient)",</pre>
                        "Married x Post (std. error)",
                        "Married (coefficient)",
                        "Married (std. error)",
                        "Individual controls",
                        "Year dummies",
                        "Region controls",
                        "Partner controls",
                        "Adjusted R2",
                        "N",
                        "RMSE",
                        "Mean (depvar)")
write.csv("@Data/Table2_R.csv")
```

"","x"

table2

```
##
                                 [,1]
                                                        [,2]
## Married x Post (coefficient) "-0.745784428233343"
                                                        "-0.651088978891319"
## Married x Post (std. error)
                                 "0.2375759137664"
                                                        "0.236155050649806"
                                 "1.7204856328034"
                                                        "3.45707942971843"
## Married (coefficient)
                                 "0.157553011349178"
                                                        "0.584392547747925"
## Married (std. error)
                                 "No"
                                                        "Yes"
## Individual controls
## Year dummies
                                 "Yes"
                                                        "Yes"
## Region controls
                                 "No"
                                                        "No"
## Partner controls
                                 "No"
                                                        "No"
## Adjusted R2
                                 "0.00218878551848701" "0.0246127483561799"
## N
                                 "69895"
                                                        "69838"
## RMSE
                                 "14.6816263007682"
                                                        "14.5123106032178"
## Mean (depvar)
                                 "2.20902782745547"
                                                        "2.20796700936453"
## Married x Post (coefficient) "-0.646985511801003" "-0.599305477182758"
## Married x Post (std. error)
                                 "0.236245677968963"
                                                       "0.323838675498471"
## Married (coefficient)
                                 "3.45023551545229"
                                                       "0.725864996712989"
## Married (std. error)
                                 "0.584369198343414"
                                                       "0.818615233305734"
                                 "Yes"
                                                       "Yes"
## Individual controls
## Year dummies
                                 "Yes"
                                                       "Yes"
                                 "Yes"
                                                       "Yes"
## Region controls
## Partner controls
                                 "No"
                                                       "Yes"
## Adjusted R2
                                 "0.0252402211066977"
                                                       "0.00908519593299796"
## N
                                 "69838"
                                                       "54757"
                                                       "14.4666621865214"
## RMSE
                                 "14.5076419219294"
## Mean (depvar)
                                 "2.20796700936453"
                                                       "2.15862812060558"
##
                                 [,5]
                                                        [,6]
## Married x Post (coefficient) "-0.686292468895241"
                                                        "0.0782602185368957"
## Married x Post (std. error)
                                 "0.221583212266074"
                                                        "0.210160399619363"
## Married (coefficient)
                                 "1.63331183352729"
                                                        "-0.819394119997815"
## Married (std. error)
                                 "0.571485068113364"
                                                        "0.519845549365915"
## Individual controls
                                 "Yes"
                                                        "Yes"
## Year dummies
                                 "Yes"
                                                        "Yes"
                                 "Yes"
                                                        "Yes"
## Region controls
## Partner controls
                                 "No"
                                                        "No"
                                                        "0.0303748318206296"
## Adjusted R2
                                 "0.00753596994744494"
## N
                                 "67895"
## RMSE
                                 "13.5022990374856"
                                                        "12.9057676316426"
## Mean (depvar)
                                 "1.87200824803005"
                                                        "1.74833185371861"
```

Table 4. Heterogeneous Impact by Presence of Young Children Using Unmarried Women as Control Group

NOTA: Tras diferentes métodos de filtrar la información, no fue posible identificar el error que producía que los resultados de las regresiones fueran realmente diferentes a las tablas generadas por el autor. Por lo tanto, se utilizó la base de datos filtrada por **STATA** para la primera parte de la elaboración de la tabla. Aún así, se anexa el código en **R**, que debería de replicar el mismo proceso.

Importa la información y filtra

Crea las variables dummy

Elabora la tabla con la data de STATA

```
"religion2 + religion3 + religion4 + religion5",
sep = " + ")
```

Regresiones

```
##
      5 & nochi018h == 1)
##
## Residuals:
      Min
               1Q Median
## -14.551 -2.591 -1.730 -0.872 101.654
## Coefficients: (1 not defined because of singularities)
              Estimate Std. Error t value Pr(>|t|)
## (Intercept) 0.38331
                       0.50758
                                  0.755 0.450154
## treatedpost -0.85411
                          0.25574 -3.340 0.000839 ***
## treated
              3.01220
                          0.60123
                                   5.010 5.46e-07 ***
## post
              0.18237
                          0.21021
                                  0.868 0.385646
              -1.73806
                          0.60759 -2.861 0.004231 **
## civils2
              7.68191
                                  9.923 < 2e-16 ***
## civils3
                          0.77416
                                  7.647 2.09e-14 ***
## civils4
              4.49306
                          0.58755
## civils5
              -1.58048
                          0.32523 -4.860 1.18e-06 ***
                                   1.110 0.267203
## year2
              0.18683
                          0.16839
## age2
              0.20145
                          0.29612
                                  0.680 0.496332
## age3
              -0.17985
                          0.32919 -0.546 0.584843
## age4
              -0.25664
                          0.31786 -0.807 0.419435
## age5
              -0.59191
                          0.32545
                                  -1.819 0.068959 .
## edu2
              -0.10783
                          0.19650 -0.549 0.583185
## edu3
              -0.18820
                          0.22816 -0.825 0.409462
## edu4
                          0.23316 -1.272 0.203228
              -0.29668
## employed
              0.17347
                          0.19761
                                  0.878 0.380048
## unemp
               0.93506
                          0.29418 3.179 0.001481 **
## housewife
               0.38117
                          0.18344
                                  2.078 0.037724 *
## children
               0.26683
                          0.29049
                                  0.919 0.358349
## nchildren
               0.25756
                          0.06679
                                  3.856 0.000115 ***
## aporta
               0.64135
                          0.20481
                                  3.131 0.001740 **
## urban
              0.51865
                          0.15967
                                   3.248 0.001162 **
## ccaa1
              0.07231
                          0.44192
                                  0.164 0.870022
## ccaa2
              -0.13404
                          0.51082 -0.262 0.793020
```

```
## ccaa3
              -0.76340
                          0.53608 -1.424 0.154447
## ccaa4
                          0.58285 -0.557 0.577285
              -0.32486
## ccaa5
              -0.57078
                          0.53134 -1.074 0.282722
## ccaa6
              -0.64909
                          0.55071
                                   -1.179 0.238546
## ccaa7
              -0.85900
                          0.52822
                                   -1.626 0.103911
## ccaa8
              -0.53093
                          0.49204
                                   -1.079 0.280580
## ccaa9
              -0.91460
                                   -2.026 0.042819 *
                          0.45154
## ccaa10
              -0.42247
                          0.46892
                                   -0.901 0.367619
## ccaa11
              -0.36439
                          0.55353 -0.658 0.510344
## ccaa12
              0.07754
                          0.47819
                                    0.162 0.871183
## ccaa13
              0.02820
                          0.43558
                                    0.065 0.948374
## ccaa14
              -0.60354
                          0.55333 -1.091 0.275397
                                   -1.593 0.111178
## ccaa15
              -0.88925
                          0.55824
              -0.44584
## ccaa16
                          0.50001
                                   -0.892 0.372588
## ccaa17
              -0.82513
                          0.62892
                                   -1.312 0.189532
## ccaa18
                    NA
                               NA
                                       NA
                                                NA
                          0.14828
                                     3.134 0.001723 **
## religion2
               0.46478
## religion3
               0.38077
                          0.27193
                                    1.400 0.161444
               1.14355
                          0.43656
                                     2.619 0.008810 **
## religion4
## religion5
                1.02223
                          0.36499
                                    2.801 0.005101 **
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 13.76 on 48061 degrees of freedom
     (43 observations deleted due to missingness)
## Multiple R-squared: 0.01831,
                                   Adjusted R-squared: 0.01743
## F-statistic: 20.85 on 43 and 48061 DF, p-value: < 2.2e-16
robust_lm(lm1)
## t test of coefficients:
##
               Estimate Std. Error t value Pr(>|t|)
                          0.535887 0.7153 0.4744419
## (Intercept) 0.383307
## treatedpost -0.854106
                          0.245890 -3.4735 0.0005141 ***
```

```
## treated
              3.012201
                         0.727045 4.1431 3.433e-05 ***
## post
              0.182372
                         0.165993 1.0987 0.2719169
## civils2
                        0.692580 -2.5095 0.0120919 *
              -1.738062
## civils3
              7.681908
                        1.347619 5.7004 1.203e-08 ***
## civils4
              4.493063
                        0.994022 4.5201 6.196e-06 ***
## civils5
             -1.580481
                         0.275123 -5.7446 9.267e-09 ***
                         0.170235 1.0975 0.2724348
## year2
              0.186830
## age2
                         0.201447
## age3
             -0.179845
                         0.350620 -0.5129 0.6079986
                         0.317186 -0.8091 0.4184545
## age4
             -0.256639
## age5
              -0.591908
                         0.313304 -1.8892 0.0588649 .
## edu2
             -0.107827
                         0.214701 -0.5022 0.6155149
## edu3
             -0.188201
                         0.240855 -0.7814 0.4345795
## edu4
                         0.243711 -1.2174 0.2234730
              -0.296684
## employed
              0.173469
                         0.183301 0.9464 0.3439711
## unemp
              0.935061
                         0.314262 2.9754 0.0029274 **
## housewife
              0.381174
                         0.172763 2.2063 0.0273644 *
## children
                        0.266826
```

```
0.074396 3.4620 0.0005366 ***
## nchildren
             0.257562
             0.641349
                       0.227763 2.8159 0.0048666 **
## aporta
## urban
             ## ccaa1
             0.072312
                       0.478147 0.1512 0.8797926
## ccaa2
             ## ccaa3
            -0.763395 0.537343 -1.4207 0.1554145
                       0.624028 -0.5206 0.6026614
## ccaa4
            -0.324857
             -0.570780 0.564510 -1.0111 0.3119706
## ccaa5
                       0.540337 -1.2013 0.2296506
## ccaa6
            -0.649093
## ccaa7
            -0.859001
                       0.518225 -1.6576 0.0974082 .
## ccaa8
            -0.530929 0.507829 -1.0455 0.2958023
## ccaa9
                       0.474969 -1.9256 0.0541613 .
             -0.914597
## ccaa10
            -0.364390 0.566271 -0.6435 0.5199082
## ccaa11
## ccaa12
            0.077542
                       0.513093 0.1511 0.8798761
## ccaa13
             0.028203
                       0.472860 0.0596 0.9524394
                       0.558554 -1.0805 0.2799098
## ccaa14
            -0.603537
## ccaa15
            -0.889255
                       0.528134 -1.6838 0.0922333 .
## ccaa16
                       0.524006 -0.8508 0.3948731
            -0.445835
## ccaa17
             ## religion2
             ## religion3
             1.143545
                       0.515033 2.2203 0.0264008 *
## religion4
             1.022230
                       0.410265 2.4916 0.0127190 *
## religion5
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
# Regression 2
lm2 <-lm(paste("ipv_ly ~ treatedpost + treated + post",</pre>
             "civils2 + civils3 + civils4 + civils5",
             controlv, sep = " + "),
       data_stata,
       agegr <= 5 & nochi018h == 0
)
summary(lm2)
##
## lm(formula = paste("ipv_ly ~ treatedpost + treated + post", "civils2 + civils3 + civils4 + civils5",
      controlv, sep = " + "), data = data_stata, subset = agegr <=</pre>
##
##
      5 & nochi018h == 0)
##
## Residuals:
##
      Min
             1Q Median
                           3Q
                                  Max
## -22.502 -2.897 -2.100 -1.322 101.276
## Coefficients: (1 not defined because of singularities)
            Estimate Std. Error t value Pr(>|t|)
## (Intercept) 5.21658
                       2.08611 2.501 0.012405 *
## treatedpost 1.47453
                                1.652 0.098461 .
                       0.89234
## treated
             6.59836
                       1.78280
                               3.701 0.000215 ***
## post
            -1.91265
                       0.88248 -2.167 0.030218 *
## civils2
            -8.99863
                       1.80743 -4.979 6.45e-07 ***
## civils3
            7.13142
                              3.718 0.000202 ***
                       1.91823
```

```
## civils4
               7.16808
                           1.03981
                                     6.894 5.59e-12 ***
## civils5
                           1.28601 -1.920 0.054852 .
               -2.46934
## year2
               -0.10711
                           0.29595 -0.362 0.717430
## age2
               -1.51097
                           0.42383
                                    -3.565 0.000365 ***
## age3
               -1.50866
                           0.44674
                                    -3.377 0.000734 ***
                           0.62094
## age4
              -1.58408
                                    -2.551 0.010746 *
## age5
               -1.89038
                           1.52302 -1.241 0.214541
## edu2
               0.77901
                           0.31843
                                     2.446 0.014437 *
## edu3
               -0.09143
                           0.35767 -0.256 0.798242
## edu4
               0.06155
                           0.37653
                                     0.163 0.870146
## employed
               -0.80162
                           0.94323
                                    -0.850 0.395409
## unemp
                0.43517
                           0.98974
                                     0.440 0.660169
## housewife
               -0.81834
                           0.94536
                                    -0.866 0.386697
## children
               -1.81275
                           1.57297
                                    -1.152 0.249154
## nchildren
                           0.14507
                                     4.588 4.49e-06 ***
               0.66564
## aporta
                0.74644
                           0.38631
                                     1.932 0.053344 .
## urban
               0.49350
                           0.28009
                                     1.762 0.078088 .
## ccaa1
               1.71063
                           0.70833
                                     2.415 0.015743 *
## ccaa2
                                     1.997 0.045852 *
               1.74260
                           0.87266
## ccaa3
               0.91278
                           0.97235
                                     0.939 0.347879
## ccaa4
               0.37703
                           0.93962
                                     0.401 0.688235
## ccaa5
               2.05303
                           0.87165
                                     2.355 0.018516 *
## ccaa6
                                    -0.066 0.947668
              -0.06468
                           0.98544
                           0.86201
                                     2.519 0.011772 *
## ccaa7
               2.17151
## ccaa8
               1.40747
                           0.84643
                                     1.663 0.096362 .
## ccaa9
               1.80184
                           0.74115
                                     2.431 0.015060 *
## ccaa10
                                     2.187 0.028751 *
               1.68267
                           0.76939
## ccaa11
               1.45139
                           0.97043
                                     1.496 0.134770
                                     0.255 0.798940
## ccaa12
               0.20449
                           0.80278
## ccaa13
              1.37430
                           0.70470
                                     1.950 0.051164 .
## ccaa14
               1.22794
                           0.92086
                                     1.333 0.182391
## ccaa15
               0.18958
                           0.97507
                                     0.194 0.845844
## ccaa16
                0.42616
                           0.86146
                                     0.495 0.620821
## ccaa17
                                     1.041 0.297690
                1.22375
                           1.17507
## ccaa18
                                        NA
                     NA
                                NA
                           0.26150
                                    -0.442 0.658850
## religion2
               -0.11545
## religion3
                0.31610
                           0.47795
                                     0.661 0.508378
## religion4
                1.01743
                           0.72385
                                     1.406 0.159862
## religion5
                1.05207
                           0.61218
                                     1.719 0.085706 .
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 16.17 on 21880 degrees of freedom
     (14 observations deleted due to missingness)
## Multiple R-squared: 0.04113,
                                    Adjusted R-squared: 0.03924
## F-statistic: 21.82 on 43 and 21880 DF, p-value: < 2.2e-16
robust_lm(lm2)
## t test of coefficients:
##
                Estimate Std. Error t value Pr(>|t|)
## (Intercept) 5.216582
                          2.391014 2.1817 0.029139 *
```

```
## treatedpost 1.474531
                          1.220584 1.2081 0.227040
## treated
               6.598365
                          3.202678 2.0603 0.039385 *
## post
              -1.912646
                          1.215100 -1.5741
                                           0.115487
## civils2
                          3.139604 -2.8662
              -8.998635
                                           0.004159 **
## civils3
               7.131425
                          3.498954 2.0382 0.041546 *
## civils4
               7.168077
                          1.833261 3.9100 9.257e-05 ***
## civils5
              -2.469344
                          1.288960 -1.9158 0.055408 .
## year2
              -0.107106
                          0.305668 -0.3504
                                            0.726042
## age2
              -1.510966
                          0.487194 -3.1014 0.001929 **
## age3
              -1.508663
                          0.516529 -2.9208 0.003495 **
## age4
              -1.584081
                          0.687001 -2.3058 0.021132 *
## age5
              -1.890383
                          1.881510 -1.0047
                                            0.315045
## edu2
               0.779013
                          0.328299 2.3729 0.017659 *
                          0.348759 -0.2622 0.793204
## edu3
              -0.091429
## edu4
               0.061553
                          0.372148 0.1654 0.868631
## employed
              -0.801621
                          1.133384 -0.7073
                                            0.479399
               0.435174
                          1.201501 0.3622 0.717212
## unemp
## housewife
              -0.818344
                          1.133825 -0.7218 0.470453
                          1.710345 -1.0599 0.289214
## children
              -1.812749
## nchildren
               0.665638
                          0.166960 3.9868 6.719e-05 ***
## aporta
               0.746445
                          0.461034 1.6191 0.105447
## urban
                          0.255988 1.9278 0.053888 .
               0.493504
## ccaa1
               1.710633
                          0.676247 2.5296 0.011426 *
                                    2.1099
## ccaa2
               1.742596
                          0.825917
                                            0.034879 *
## ccaa3
               0.912776
                          0.885829 1.0304 0.302824
## ccaa4
               0.377027
                          0.868040 0.4343 0.664044
## ccaa5
                          0.940910 2.1820 0.029123 *
               2.053026
## ccaa6
              -0.064681
                          0.833603 -0.0776 0.938153
## ccaa7
               2.171507
                          0.859241
                                   2.5272 0.011503 *
## ccaa8
               1.407472
                          0.802348 1.7542 0.079412 .
## ccaa9
               1.801838
                          0.719298 2.5050 0.012253 *
## ccaa10
               1.682670
                          0.741816 2.2683 0.023320 *
## ccaa11
               1.451388
                          0.913586 1.5887
                                            0.112149
                          0.701931 0.2913 0.770810
## ccaa12
               0.204486
## ccaa13
               1.374304
                          0.665775 2.0642 0.039009 *
## ccaa14
               1.227940
                          0.879641 1.3960 0.162742
## ccaa15
               0.189579
                          0.823633 0.2302 0.817959
## ccaa16
                          0.753444 0.5656 0.571663
               0.426158
## ccaa17
                          1.054332 1.1607
               1.223749
                                            0.245782
## religion2
              -0.115453
                          0.252207 -0.4578 0.647120
## religion3
               0.316103
                          0.508516 0.6216 0.534200
## religion4
                          0.872201 1.1665
               1.017426
                                           0.243423
## religion5
               1.052073
                          0.717974 1.4653 0.142844
## ---
## Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' ' 1
# Regression 3
data_stata2 <- data_stata[data_stata$couple == 1</pre>
                          | (data_stata$marital == 4 & data_stata$couple == 0),]
data_stata2 <- data_stata2[!(data_stata2$marital == 4 & case_when(is.na(data_stata2$duration) ~ T, T ~ 1
data_stata2$tech_v <- data_stata2$tech_v * 100
```

```
lm3 <- lm(paste("tech_v ~ treatedpost + treated + post",</pre>
                "edu_h2 + edu_h3 + edu_h4",
                "part_h + fullt_h",
                controlv, sep = " + "),
          data_stata2,
          agegr <= 5 & nochi018h==1)
summary(lm3)
##
## Call:
## lm(formula = paste("tech_v ~ treatedpost + treated + post", "edu_h2 + edu_h3 + edu_h4",
       "part_h + fullt_h", controlv, sep = " + "), data = data_stata2,
##
       subset = agegr <= 5 & nochi018h == 1)</pre>
##
## Residuals:
##
       Min
                1Q Median
                                30
## -23.883 -13.795 -9.819 -4.262 101.163
## Coefficients: (1 not defined because of singularities)
##
               Estimate Std. Error t value Pr(>|t|)
                            1.4249
                                     3.669 0.000243 ***
## (Intercept)
                 5.2287
## treatedpost -4.1235
                            0.7536 -5.472 4.49e-08 ***
## treated
                 2.9586
                            0.7697
                                     3.844 0.000121 ***
## post
                -0.1733
                            0.6882 -0.252 0.801237
                            0.5875 -2.496 0.012583 *
## edu_h2
                -1.4661
                -2.7909
                            0.6333 -4.407 1.05e-05 ***
## edu_h3
                            0.6726 -5.542 3.01e-08 ***
## edu h4
                -3.7277
                                     0.344 0.731087
## part h
                0.3580
                            1.0418
## fullt h
                -1.1127
                            0.4332 -2.569 0.010215 *
## year2
                -0.6070
                            0.4425 -1.372 0.170201
## age2
                                     2.230 0.025780 *
                1.7320
                            0.7768
## age3
                 3.2846
                            0.9323
                                     3.523 0.000427 ***
## age4
                 4.6402
                            0.9306
                                     4.986 6.19e-07 ***
## age5
                 3.4565
                            0.9816
                                    3.521 0.000430 ***
                            0.6133
## edu2
                 1.0580
                                     1.725 0.084531 .
## edu3
                -0.4086
                            0.7058
                                    -0.579 0.562685
## edu4
                -0.2098
                            0.7593
                                    -0.276 0.782296
## employed
                 0.1223
                            0.5459
                                     0.224 0.822702
## unemp
                 0.2047
                            0.7919
                                     0.258 0.796051
## housewife
                            0.5113
                                     0.289 0.772351
                 0.1479
## children
                 0.5440
                            0.7818
                                     0.696 0.486568
## nchildren
                 1.0341
                            0.1784
                                     5.797 6.79e-09 ***
                            0.5844
## aporta
                 1.8958
                                     3.244 0.001180 **
## urban
                            0.4146
                                     1.959 0.050157 .
                 0.8121
## ccaa1
                 1.3691
                            1.2054
                                     1.136 0.256029
## ccaa2
                            1.3792 -1.580 0.114171
                -2.1787
## ccaa3
                -0.5500
                            1.4463 -0.380 0.703726
## ccaa4
                 0.2353
                            1.5787
                                     0.149 0.881513
## ccaa5
                 0.2361
                            1.4425
                                     0.164 0.869967
## ccaa6
                -0.7029
                            1.4940
                                    -0.471 0.637980
## ccaa7
                            1.4232
                                     0.257 0.796894
                0.3663
## ccaa8
                1.7018
                            1.3338
                                     1.276 0.201991
```

1.2305 -0.593 0.553121

ccaa9

-0.7298

```
## ccaa10
               -0.8201
                           1.2738 -0.644 0.519720
## ccaa11
                                   0.069 0.945091
                0.1020
                           1.4807
## ccaa12
                0.3107
                           1.2993
                                    0.239 0.810988
## ccaa13
                0.7834
                           1.1886
                                   0.659 0.509840
## ccaa14
                1.6833
                           1.4811
                                    1.137 0.255755
## ccaa15
               -2.2515
                           1.5146 -1.486 0.137164
                                    0.110 0.912492
## ccaa16
                0.1481
                          1.3478
## ccaa17
               -2.2790
                           1.6880
                                   -1.350 0.176990
## ccaa18
                    NA
                               NA
                                       NA
                                                 NA
## religion2
                1.2155
                           0.3865
                                     3.145 0.001662 **
## religion3
                1.4588
                           0.7175
                                     2.033 0.042033 *
## religion4
                2.0016
                           1.1796
                                     1.697 0.089737 .
## religion5
                1.7975
                           0.9666
                                    1.860 0.062943 .
## ---
## Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 30.23 on 34040 degrees of freedom
     (545 observations deleted due to missingness)
## Multiple R-squared: 0.02675, Adjusted R-squared: 0.0255
## F-statistic: 21.27 on 44 and 34040 DF, p-value: < 2.2e-16
robust lm(lm3)
##
```

```
## t test of coefficients:
##
##
              Estimate Std. Error t value Pr(>|t|)
## (Intercept) 5.22874
                          1.37205 3.8109 0.0001387 ***
                          0.61678 -6.6855 2.337e-11 ***
## treatedpost -4.12347
## treated
               2.95864
                          0.68969 4.2898 1.793e-05 ***
## post
              -0.17327
                          0.52507 -0.3300 0.7414153
## edu_h2
              -1.46611
                          0.63664 -2.3029 0.0212919 *
## edu_h3
                          0.63999 -4.3608 1.299e-05 ***
              -2.79091
## edu h4
              -3.72767
                          0.66420 -5.6123 2.012e-08 ***
## part_h
                          0.97232 0.3682 0.7126964
               0.35805
## fullt h
              -1.11269
                          0.44406 -2.5057 0.0122244 *
## year2
              -0.60696
                          0.46553 -1.3038 0.1923095
## age2
               1.73199
                          0.64055 2.7039 0.0068565 **
                          0.93903 3.4978 0.0004697 ***
## age3
               3.28456
## age4
               4.64020
                          0.94022 4.9352 8.044e-07 ***
## age5
               3.45653
                          0.99348 3.4792 0.0005035 ***
## edu2
               1.05801
                          0.67015 1.5788 0.1144008
## edu3
              -0.40859
                          0.70610 -0.5787 0.5628261
## edu4
              -0.20983
                          0.74444 -0.2819 0.7780554
## employed
               0.12232
                          0.49979 0.2448 0.8066501
                          0.67710 0.3023 0.7624350
## unemp
               0.20468
## housewife
               0.14792
                          0.53805
                                   0.2749 0.7833846
## children
               0.54398
                          0.82602 0.6586 0.5101882
## nchildren
             1.03409
                          0.20374 5.0755 3.885e-07 ***
## aporta
               1.89576
                          0.59859 3.1670 0.0015414 **
## urban
               0.81213
                          0.41797 1.9430 0.0520216 .
## ccaa1
              1.36911
                          1.19350 1.1471 0.2513352
## ccaa2
                          1.31860 -1.6523 0.0984807 .
              -2.17873
                          1.41524 -0.3886 0.6975466
```

ccaa3

-0.55002

```
## ccaa4
               0.23531
                          1.58199 0.1487 0.8817551
                          1.42274 0.1660 0.8681782
## ccaa5
               0.23614
## ccaa6
              -0.70295
                          1.43939 -0.4884 0.6252959
## ccaa7
              0.36628
                          1.43157 0.2559 0.7980617
## ccaa8
               1.70176
                          1.35224 1.2585 0.2082276
                          1.21238 -0.6020 0.5472072
## ccaa9
              -0.72980
                          1.24992 -0.6561 0.5117690
## ccaa10
              -0.82006
                          1.48535 0.0687 0.9452615
## ccaa11
              0.10198
## ccaa12
              0.31073
                          1.28273 0.2422 0.8085942
## ccaa13
              0.78341
                          1.17100 0.6690 0.5034944
## ccaa14
              1.68330
                          1.50294 1.1200 0.2627205
## ccaa15
                          1.42976 -1.5747 0.1153291
              -2.25148
## ccaa16
               0.14812
                          1.33405 0.1110 0.9115955
              -2.27904
## ccaa17
                         1.57824 -1.4440 0.1487372
                          0.40627 2.9920 0.0027740 **
## religion2
              1.21554
## religion3
               1.45879
                          0.62969
                                  2.3167 0.0205273 *
## religion4
               2.00163
                          1.19660 1.6728 0.0943844 .
## religion5
               1.79749
                          0.88082 2.0407 0.0412874 *
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
# Regression 4
lm4 <- lm(paste("tech_v ~ treatedpost + treated + post",</pre>
               "edu_h2 + edu_h3 + edu_h4",
               "part_h + fullt_h",
               controlv, sep = " + "),
         data_stata2,
         agegr \le 5 \& nochi018h==0)
summary(lm4)
##
## Call:
## lm(formula = paste("tech_v ~ treatedpost + treated + post", "edu_h2 + edu_h3 + edu_h4",
      "part_h + fullt_h", controlv, sep = " + "), data = data_stata2,
##
      subset = agegr <= 5 & nochi018h == 0)</pre>
##
## Residuals:
               1Q Median
                               30
                                     Max
## -30.346 -12.731 -9.483 -6.464 97.977
## Coefficients: (1 not defined because of singularities)
##
               Estimate Std. Error t value Pr(>|t|)
## (Intercept) 19.524854
                          4.273165
                                   4.569 4.92e-06 ***
                          2.066557
                                    0.050 0.960236
## treatedpost 0.103034
## treated
              -3.153763
                         1.580047 -1.996 0.045948 *
                          2.052925 -1.309 0.190452
## post
              -2.687866
## edu_h2
              -2.756576
                          0.751872 -3.666 0.000247 ***
                          0.800561 -6.266 3.78e-10 ***
## edu_h3
              -5.016273
## edu h4
              -5.475676
                          0.881894 -6.209 5.43e-10 ***
                          1.447916 -1.792 0.073127 .
              -2.594853
## part_h
## fullt h
              -3.200636
                          0.725078 -4.414 1.02e-05 ***
## year2
              -1.069945
                          0.580143 -1.844 0.065157 .
              -0.515611
                          0.830658 -0.621 0.534787
## age2
              ## age3
```

```
## age4
               1.718456
                         1.234656
                                   1.392 0.163983
                         3.261838 -0.665 0.506302
## age5
              -2.167880
                         0.750072
                                   0.396 0.692225
## edu2
              0.296911
## edu3
                         0.826805
                                  -1.558 0.119315
              -1.287931
## edu4
              -1.716204 0.920869
                                  -1.864 0.062381
## employed
              -1.275946 1.968249 -0.648 0.516821
## unemp
               0.358029
                         2.054772
                                   0.174 0.861677
## housewife
              -1.071441
                         1.969875 -0.544 0.586507
## children
              -1.011229
                         3.152793 -0.321 0.748410
## nchildren
              1.675742
                         0.288033
                                  5.818 6.05e-09 ***
## aporta
               0.415797
                         0.787029 0.528 0.597288
## urban
               0.516219
                         0.547317
                                    0.943 0.345599
## ccaa1
               0.463627
                         1.401629
                                  0.331 0.740816
                         1.721682 -1.052 0.292728
## ccaa2
              -1.811525
## ccaa3
              -0.295890
                         1.923278 -0.154 0.877732
## ccaa4
              -3.058341
                         1.859595
                                   -1.645 0.100062
## ccaa5
              -0.522208
                         1.743127 -0.300 0.764500
## ccaa6
              -1.174354
                         1.935989 -0.607 0.544129
                         1.694484
## ccaa7
              2.801130
                                  1.653 0.098328
## ccaa8
              -0.906486
                         1.668146 -0.543 0.586854
## ccaa9
              -0.991950
                         1.466094 -0.677 0.498671
## ccaa10
              -0.659742
                         1.519795 -0.434 0.664221
## ccaa11
                                   0.194 0.845853
              0.370268
                         1.904531
## ccaa12
                         1.586867 -1.336 0.181530
              -2.120218
## ccaa13
              -0.007876 1.395125 -0.006 0.995496
## ccaa14
              -1.052535
                         1.810285 -0.581 0.560964
## ccaa15
              -0.012102
                         1.925200
                                  -0.006 0.994985
## ccaa16
              -1.681433
                         1.699868
                                  -0.989 0.322599
## ccaa17
              -0.691882
                         2.307102 -0.300 0.764262
## ccaa18
                    NA
                               NA
                                       NΑ
                                               NA
## religion2
               1.410563
                         0.511899
                                    2.756 0.005864 **
## religion3
               0.528938
                         0.943691
                                    0.560 0.575145
## religion4
               4.624057
                         1.434640
                                    3.223 0.001270 **
                                    1.326 0.184921
## religion5
               1.612379
                         1.216158
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## Residual standard error: 30.8 on 20627 degrees of freedom
    (233 observations deleted due to missingness)
## Multiple R-squared: 0.01866,
                                  Adjusted R-squared: 0.01657
## F-statistic: 8.914 on 44 and 20627 DF, p-value: < 2.2e-16
robust_lm(lm4)
##
## t test of coefficients:
##
##
                Estimate Std. Error t value Pr(>|t|)
## (Intercept) 19.5248538 4.3424643 4.4963 6.954e-06 ***
## treatedpost 0.1030336 2.2154263 0.0465 0.9629063
## treated
              -3.1537628 1.7553221 -1.7967 0.0724001 .
## post
              -2.6878658 2.2109362 -1.2157 0.2241079
              -2.7565761 0.8711177 -3.1644 0.0015562 **
## edu h2
              ## edu h3
```

```
## edu h4
              -5.4756765 0.9405222 -5.8220 5.903e-09 ***
## part_h
              -2.5948530 1.5537976 -1.6700 0.0949331 .
              -3.2006356  0.8289149  -3.8612  0.0001132 ***
## fullt h
              -1.0699447 0.6088543 -1.7573 0.0788801 .
## year2
## age2
              ## age3
             0.8632920 0.8880832 0.9721 0.3310199
## age4
             1.7184559 1.3203902 1.3015 0.1931102
              -2.1678796 3.6607779 -0.5922 0.5537292
## age5
## edu2
              0.2969112  0.8572006  0.3464  0.7290659
## edu3
              -1.2879306 0.8958992 -1.4376 0.1505672
              -1.7162036 0.9644750 -1.7794 0.0751861
## edu4
## employed
              -1.2759459 2.0870234 -0.6114 0.5409606
              0.3580287 2.1830926 0.1640 0.8697322
## unemp
## housewife
             -1.0714406 2.0989650 -0.5105 0.6097337
## children
              -1.0112294 3.0471060 -0.3319 0.7399942
              1.6757425  0.3157990  5.3064  1.130e-07 ***
## nchildren
             0.4157967 0.7682274 0.5412 0.5883469
## aporta
## urban
              0.5162191 0.5473562 0.9431 0.3456339
## ccaa1
              0.4636274 1.4928593 0.3106 0.7561357
## ccaa2
              -1.8115247 1.7168422 -1.0551 0.2913694
## ccaa3
             -0.2958901 1.9747844 -0.1498 0.8808969
## ccaa4
              -3.0583408 1.8329171 -1.6686 0.0952189 .
             -0.5222076 1.8262530 -0.2859 0.7749233
## ccaa5
## ccaa6
              -1.1743541 1.9229193 -0.6107 0.5413955
## ccaa7
             2.8011298 1.8450238 1.5182 0.1289773
## ccaa8
             -0.9064859 1.7217260 -0.5265 0.5985477
## ccaa9
              -0.9919501 1.5316006 -0.6477 0.5172148
             -0.6597422 1.5975976 -0.4130 0.6796410
## ccaa10
## ccaa11
             0.3702681 2.0267140 0.1827 0.8550401
## ccaa12
            -2.1202181 1.6215382 -1.3075 0.1910456
            -0.0078756 1.4616035 -0.0054 0.9957008
## ccaa13
## ccaa14
              -1.0525351 1.8701081 -0.5628 0.5735633
## ccaa15
              -0.0121019 1.9703897 -0.0061 0.9950996
## ccaa16
              -1.6814327 1.7171009 -0.9792 0.3274790
## ccaa17
              -0.6918816 2.3213096 -0.2981 0.7656630
             1.4105627 0.5083125 2.7750 0.0055253 **
## religion2
## religion3
             0.5289379  0.8612334  0.6142  0.5391142
## religion4
             4.6240567 1.6173078 2.8591 0.0042526 **
## religion5
               1.6123794 1.1935387 1.3509 0.1767348
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
```

Crea la tabla

```
"B. Married x Post (std. error)",
                 "B. Married",
                 "B. Married (std. error)",
                 "B. Post",
                 "B. Post (std. error)"
# Create a vector with the name of the columns
t4.colnames <- c("Self-Reported Abuse (1)", "Technical Abuse (2)")
# Create a list with the varibles to be displayed in the table
t4.variables <- c("treatedpost", "treated", "post")
# Create a list with linear models
lms <- list(lm2, lm1, lm4, lm3)</pre>
# Create an empty list for appending the results of each model
lms_results <- c()</pre>
# Create a loop and read all the linear models
for (lm in lms) {
  lm_ir <- lm %>% robust_lm()
  t4.r <- c("") # Define an empty vector for storage
  for (var in t4.variables) {
   estimate <- lm ir[var, "Estimate"]</pre>
    se <- lm_ir[var, "Std. Error"]</pre>
   t4.r <- t4.r %>% append(c(estimate, se))
  lms_results <- lms_results %>% append(t4.r,)
# Show the results
t4 <- cbind(lms_results[1:14], lms_results[15:length(lms_results)]) %%
  as.data.frame()
row.names(t4) <- t4.rownames</pre>
colnames(t4) <- t4.colnames
+4
##
                                     Self-Reported Abuse (1) Technical Abuse (2)
## A. Women with young children:
## A. Married x Post
                                            1.47453071796968
                                                              0.103033622647639
## A. Married x Post (std. error)
                                            1.22058355762913
                                                                2.21542632671838
## A. Married
                                            6.59836463879987
                                                               -3.15376276857588
## A. Married (std. error)
                                            3.20267800031897
                                                              1.75532209980515
## A. Post
                                                                -2.6878658161887
                                           -1.91264639452398
## A. Post (std. error)
                                            1.21510009244574
                                                                2.21093621611313
## B. Women without young children:
## B. Married x Post
                                          -0.854106305095456 -4.12347113951513
## B. Married x Post (std. error)
                                          0.245890003945369 0.616780884708992
```

```
## B. Married 3.01220090697812 2.95864032724652

## B. Married (std. error) 0.727045326053583 0.689688357240991

## B. Post 0.182371704324243 -0.173265107603743

## B. Post (std. error) 0.165992928015848 0.52507379483757
```

Save the dataframe into a csv file
write.csv(t4, "@Data/table_4_R.csv")