

# Analysis

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```
if (!require('cowplot')) install.packages('cowplot'); library('cowplot')
```

```
## Loading required package: cowplot
```

```
##
```

```
## Attaching package: 'cowplot'
```

```
## The following object is masked from 'package:patchwork':
```

```
##
```

```
## align_plots
```

```
if (!require('dplyr')) install.packages('dplyr'); library('dplyr')
```

```
if (!require('esquisse')) install.packages('esquisse'); library('esquisse')
```

```
## Loading required package: esquisse
```

```
if (!require('gapminder')) install.packages('gapminder'); library('gapminder')
```

```
## Loading required package: gapminder
```

```
if (!require('geomtextpath')) install.packages('geomtextpath'); library('geomtextpath')
```

```
## Loading required package: geomtextpath
```

```
if (!require('gghighlight')) install.packages('gghighlight'); library('gghighlight')
```

```
## Loading required package: gghighlight
```

```
if (!require('ggplot2')) install.packages('ggplot2'); library('ggplot2')
```

```
if (!require('ggrain')) install.packages('ggrain'); library('ggrain')
```

```

## Loading required package: ggrain

## Registered S3 methods overwritten by 'ggpp':
##   method                from
##   heightDetails.titleGrob ggplot2
##   widthDetails.titleGrob  ggplot2

if (!require('ggthemes')) install.packages('ggthemes'); library('ggthemes')

## Loading required package: ggthemes

##
## Attaching package: 'ggthemes'

## The following object is masked from 'package:cowplot':
##
##   theme_map

if (!require('ggribes')) install.packages('ggribes'); library('ggribes')

## Loading required package: ggribes

if (!require('ggtext')) install.packages('ggtext'); library('ggtext')

## Loading required package: ggtext

if (!require('knitr')) install.packages('knitr'); library('knitr')

## Loading required package: knitr

if (!require('plotly')) install.packages('plotly'); library('plotly')

## Loading required package: plotly

##
## Attaching package: 'plotly'

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

## The following object is masked from 'package:stats':
##
##   filter

## The following object is masked from 'package:graphics':
##
##   layout

```

```
if (!require('purrr')) install.packages('purrr'); library('purrr')
if (!require('readr')) install.packages('readr'); library('readr')
if (!require('sjPlot')) install.packages('sjPlot'); library('sjPlot')
```

```
## Loading required package: sjPlot
```

```
##
```

```
## Attaching package: 'sjPlot'
```

```
## The following objects are masked from 'package:cowplot':
```

```
##
```

```
##      plot_grid, save_plot
```

```
if (!require('tidyr')) install.packages('tidyr'); library('tidyr')
if (!require('psych')) install.packages('psych'); library('psych')
if (!require('ggpubr')) install.packages('ggpubr'); library('ggpubr')
```

```
## Loading required package: ggpubr
```

```
##
```

```
## Attaching package: 'ggpubr'
```

```
## The following object is masked from 'package:cowplot':
```

```
##
```

```
##      get_legend
```

```
if (!require('rstatix')) install.packages('rstatix'); library('rstatix')
```

```
## Loading required package: rstatix
```

```
##
```

```
## Attaching package: 'rstatix'
```

```
## The following object is masked from 'package:janitor':
```

```
##
```

```
##      make_clean_names
```

```
## The following object is masked from 'package:stats':
```

```
##
```

```
##      filter
```

```
if (!require('devtools')) install.packages('devtools'); library('devtools')
```

```
## Loading required package: devtools
```

```
## Loading required package: usethis
```

```
##
```

```
## Attaching package: 'devtools'
```

```

## The following object is masked from 'package:testthat':
##
##   test_file

## The following object is masked from 'package:renv':
##
##   install

# Para ggResidpanel desde GitHub
if (!require('ggResidpanel')) {
  devtools::install_github('goodekat/ggResidpanel')
  library('ggResidpanel')
}

## Loading required package: ggResidpanel

##
## Attaching package: 'ggResidpanel'

## The following object is masked from 'package:datasets':
##
##   penguins

if (!require('afex')) install.packages('afex'); library('afex')

## Loading required package: afex

## Loading required package: lme4

## Loading required package: Matrix

##
## Attaching package: 'Matrix'

## The following objects are masked from 'package:tidyr':
##
##   expand, pack, unpack

## *****
## Welcome to afex. For support visit: http://afex.singmann.science/

## - Functions for ANOVAs: aov_car(), aov_ez(), and aov_4()
## - Methods for calculating p-values with mixed(): 'S', 'KR', 'LRT', and 'PB'
## - 'afex_aov' and 'mixed' objects can be passed to emmeans() for follow-up tests
## - Get and set global package options with: afex_options()
## - Set sum-to-zero contrasts globally: set_sum_contrasts()
## - For example analyses see: browseVignettes("afex")
## *****

##
## Attaching package: 'afex'

```

```

## The following object is masked from 'package:lme4':
##
##      lmer

if (!require('correlation')) install.packages('correlation'); library('correlation')

## Loading required package: correlation

##
## Attaching package: 'correlation'

## The following object is masked from 'package:rstatix':
##
##      cor_test

if (!require('corrr')) install.packages('corrr'); library('corrr')

## Loading required package: corrr

if (!require('gtsummary')) install.packages('gtsummary'); library('gtsummary')
if (!require('haven')) install.packages('haven'); library('haven')

## Loading required package: haven

if (!require('inspectdf')) install.packages('inspectdf'); library('inspectdf')

## Loading required package: inspectdf

if (!require('lme4')) install.packages('lme4'); library('lme4')
if (!require('papaja')) install.packages('papaja'); library('papaja')

## Loading required package: papaja

## Loading required package: tinylabels

if (!require('parameters')) install.packages('parameters'); library('parameters')

## Loading required package: parameters

##
## Attaching package: 'parameters'

## The following object is masked from 'package:papaja':
##
##      ci

```

```
if (!require('performance')) install.packages('performance'); library('performance')
```

```
## Loading required package: performance
```

```
if (!require('report')) install.packages('report'); library('report')
```

```
## Loading required package: report
```

## Data preparation

Descripción del proceso de preparación de datos.

```
DF =  
  DF_analysis$DF_analysis %>%  
  
  # Update with your variable names  
  select(id, ends_with("_DIRd"), ends_with("_DIRt"))  
  
  # Continue your data preparation, if needed  
  #   filter() %>%  
  #   drop_na()  
df= DF
```

## Descriptive tables

Tabla 1. Descripción de la tabla 1. Tabla 2. ...

```
# You can add a variable to the `by` argument and uncomment  
# names(DF) shows the variables you have available  
  
table1 <- DF %>%  
  select(-c(Goodbye_DIRt, id, Consent_DIRt)) %>%  
  gtsummary::tbl_summary(  
    type = list(everything() ~ "continuous")  
  )  
  
table1
```

## Plots

Figura 1. Descripción de la Figura 1. Figura 2. ...

```
# Remember to change the variables in your plot  
  
scatterplot = ggplot(df, aes(MDDF_DisgustoMoralDumbfounding_DIRd, CRS_Ideologica_DIRd)) +  
  geom_point() +  
  geom_smooth(method = "lm") + labs(  
    title = "Fit Regression", x = 'Moral Dumbfounding',
```

Characteristic	N = 60 <sup>1</sup>
CRS_Intelectual_DIRd	3.33 (2.50, 3.67)
CRS_Ideologica_DIRd	3.33 (2.50, 3.67)
CRS_PracticaPublica_DIRd	3.33 (2.67, 3.67)
CRS_PracticaPrivada_DIRd	3.25 (2.67, 3.58)
CRS_ExperienciaReligiosa_DIRd	3.20 (2.60, 3.60)
MDDF_DisgustoMoralDumbfounding_DIRd	10.0 (8.0, 12.5)
MDDF_DisgustoMoralSinDumbfounding_DIRd	24.0 (19.0, 29.0)
MDDF_DisgustoNoMoral_DIRd	33 (26, 38)
MDDF_SituacionesControl_DIRd	30 (25, 39)
CRS_DIRt	61.0 (58.5, 68.0)
MDDF_DIRt	100 (89, 107)

<sup>1</sup>Median (Q1, Q3)

```

    y = 'Ideological CRS'
  )

plot2 <- ggplot(df, aes(MDDF_DisgustoMoralDumbfounding_DIRd, , fill = "PuBuGn")) +
  geom_histogram(, bins = 7, alpha = .5) +
  guides(fill = 'none') +
  labs(x = "Disgusto Moral Dumbfounding",
       y = 'Frecuencia', title = 'Distribución')

plot3 <- ggplot(df, aes(CRS_Ideologica_DIRd, , fill = "YIOrRd")) +
  geom_histogram(, bins = 7, alpha = .5) +
  guides(fill = 'none') +
  labs(x = "Ideological",
       y = 'Frecuencia', title = 'Distribución')

# Define marginal histogram
marginal_distribution <- function(x, var) {
  ggplot(x, aes(x = get(var), fill = "YIOrRd")) +
    geom_histogram(bins = 7, alpha = 0.4) +
    # geom_density(alpha = 0.4, size = 0.1) +
    guides(fill = "none") +
    theme_void() +
    theme(plot.margin = margin())
}

# Set up marginal histograms
x_hist <- marginal_distribution(df, "MDDF_DisgustoMoralDumbfounding_DIRd")
y_hist <- marginal_distribution(df, "CRS_Ideologica_DIRd") +
  coord_flip()

# Align histograms with scatterplot
aligned_x_hist <- align_plots(x_hist, scatterplot, align = "v")[[1]]

## 'geom_smooth()' using formula = 'y ~ x'

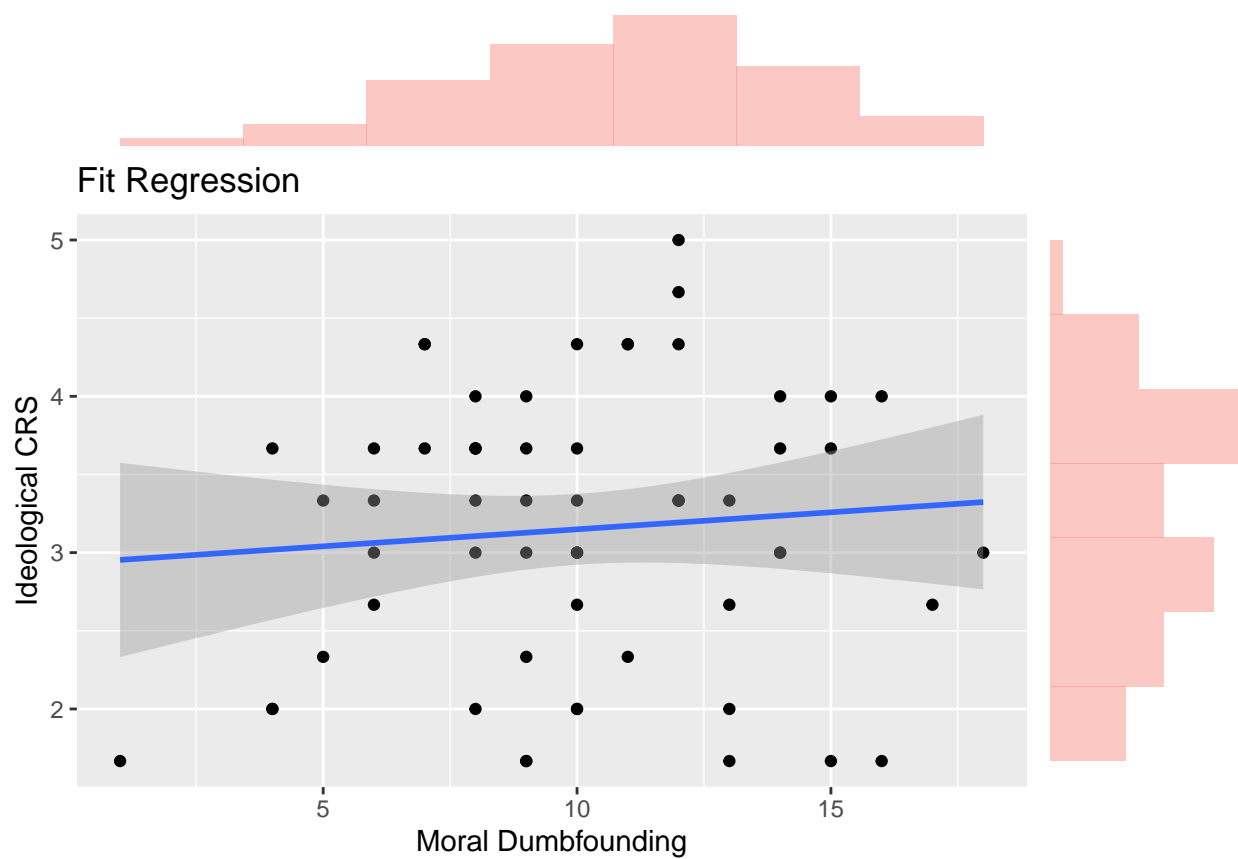
```

```
aligned_y_hist <- align_plots(y_hist, scatterplot, align = "h")[[1]]
```

```
## 'geom_smooth()' using formula = 'y ~ x'
```

```
# Arrange plots
cowplot::plot_grid(
  aligned_x_hist, NULL, scatterplot, aligned_y_hist,
  ncol = 2, nrow = 2,
  rel_heights = c(0.2, 1), rel_widths = c(1, 0.2)
)
```

```
## 'geom_smooth()' using formula = 'y ~ x'
```



## Analysis

```
# Remember to change the variables used in your model and inline_text

fit <- lm(MDDF_DisgustoMoralDumbfounding_DIRd ~ CRS_Ideologica_DIRd, data = df)

table_1 <- gtsummary::tbl_regression(fit, intercept = TRUE) %>%
  add_global_p() %>%
  bold_labels() %>%
```



Characteristic	Beta	95% CI	p-value
<i>(Intercept)</i>	8.9	5.4, 12	<0.001
<i>CRS_Ideologica_DIRd</i>	0.36	-0.71, 1.4	0.5

Abbreviation: CI = Confidence Interval

No. Obs. = 60; Residual df = 58;  $R^2 = 0.008$ ; Adjusted  $R^2 = -0.009$ ; Statistic = 0.463; p-value = 0.5

```
italicize_labels() %>%
add_glance_source_note(include = c("nobs", "df.residual", "r.squared", "adj.r.squared", "statistic", "p.value"))

table_1
```

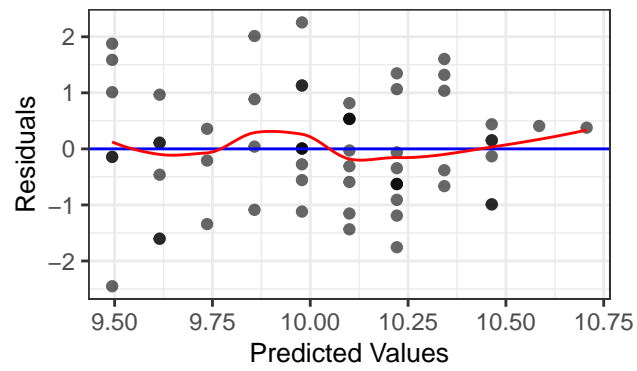
```
# report::report(model1)

paste0("CRS_Ideological was not a significant predictor of EAR",
      ", beta = ",
      gtsummary::inline_text(table_1, variable = CRS_Ideologica_DIRd))
```

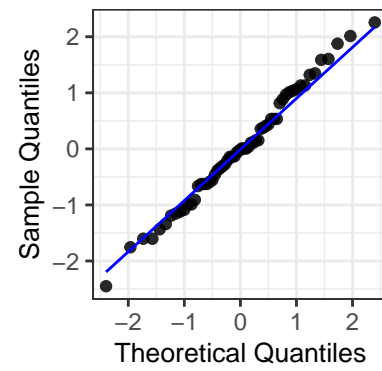
```
## [1] "CRS_Ideological was not a significant predictor of EAR, beta = 0.36 (95% CI -0.71, 1.4; p=0.5)"
```

```
resid_panel(fit)
```

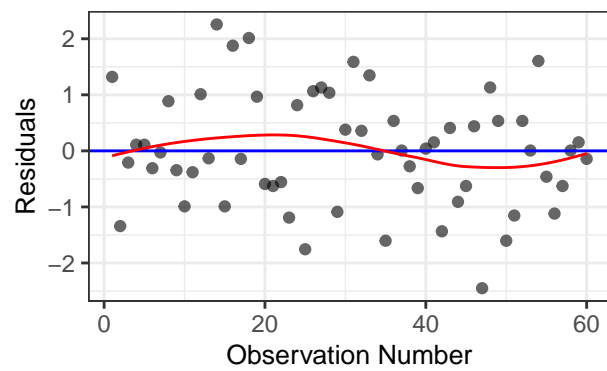
**Residual vs Fitted Plot**



**Q-Q Plot**



**Index Plot**



**Histogram**

