PruebaPDF.R

jdl

2024-08-13

```r
# Cargar paquetes----
library(car)
```

```
## Loading required package: carData
```

```r
library(ggstats)
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ----------------------- tidyverse 2.0.0 --
## v dplyr     1.1.4      v readr      2.1.5
## v forcats   1.0.0      v stringr    1.5.1
## v ggplot2   3.5.1      v tibble     3.2.1
## v lubridate 1.9.3      v tidyr      1.3.1
## v purrr     1.0.2
## -- Conflicts ------------------------------------------- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## x dplyr::recode() masks car::recode()
## x purrr::some()   masks car::some()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```r
library(ggpubr)
library(readxl)
library(lmerTest)
```

```
## Loading required package: lme4
## Loading required package: Matrix
##
## Attaching package: 'Matrix'
##
## The following objects are masked from 'package:tidyr':
##
##     expand, pack, unpack
##
##
## Attaching package: 'lmerTest'
##
## The following object is masked from 'package:lme4':
##
##     lmer
##
## The following object is masked from 'package:stats':
##
##     step
```

```r
library(emmeans)
```

```
## Welcome to emmeans.
## Caution: You lose important information if you filter this package's results.
## See '? untidy'
```

```r
library(knitr)
library(kableExtra)
```

```
##
## Attaching package: 'kableExtra'
##
## The following object is masked from 'package:dplyr':
##
##     group_rows
```

```r
library(performance)
library(MuMIn)
library(tictoc)
library(GGally)
```

```
## Registered S3 method overwritten by 'GGally':
##   method from
##   +.gg   ggplot2
##
## Attaching package: 'GGally'
##
## The following object is masked from 'package:emmeans':
##
##     pigs
```

```r
library(scales)
```

```
##
## Attaching package: 'scales'
##
## The following object is masked from 'package:purrr':
##
##     discard
##
## The following object is masked from 'package:readr':
##
##     col_factor
```

```r
# Functions----
corr.stars <- function(x) {
  require(Hmisc)
  x <- as.matrix(x)
  R <- rcorr(x)$r
  p <- rcorr(x)$P
  # define notions for significance levels; spacing is important.
  mystars <- ifelse(p < .001,
                    paste0(round(R, 2), "***"),
                    ifelse(p < .01,
                           paste0(round(R, 2), "**"),
                           ifelse(p < .05,
```

```r
                                             paste0(round(R, 2), "*"),
                                             ifelse(p < .10,
                                                    paste0(round(R, 2), "†"),
                                                    format(round(R, 2), nsmall = 2)))))
  # build a new matrix that includes the correlations with their appropriate stars
  Rnew <- matrix(mystars,
                 ncol = ncol(x))
  diag(Rnew) <- paste(diag(R), " ",
                      sep = "")
  rownames(Rnew) <- colnames(x)
  colnames(Rnew) <- paste(colnames(x), "",
                          sep = "")
  # remove upper triangle
  Rnew <- as.matrix(Rnew)
  Rnew[upper.tri(Rnew, diag = TRUE)] <- ""
  Rnew <- as.data.frame(Rnew)
  # remove last column and return the matrix (which is now a data frame)
  Rnew <- cbind(Rnew[1:length(Rnew) - 1])
  return(Rnew)
}

# Cargar datos----

## Eye-tracking----
dat_et <- read_excel("Datos/BD-ET-CUC-UB.xlsx",
                     sheet = "CUC-UB") |>
  select(-c(Participant, Condicion, TOI, Interval, Media_respuesta, AOI, AOI_Global, Respuesta, Number_
  rename(ID = Recording,
         University = UNIVERSIDAD,
         Stimulus = Media,
         Condition = Condición,
         Relationship = Contexto,
         Sexual_dimorphism = Rostro,
         TDF = Total_duration_of_whole_fixations,
         NF = Number_of_whole_fixations,
         TFF = Time_to_first_whole_fixation,
         NMC = Number_of_mouse_clicks...21,
         TFMC = Time_to_first_mouse_click...22) |>
  mutate(across(where(is.character), as.factor)) |>
  mutate(Condition = fct_recode(Condition,
                                "Low" = "BAJA",
                                "High" = "ALTA"),
         Relationship = fct_recode(Relationship,
                                   "Short term" = "CP",
                                   "Long term" = "LP"),
         Sexual_dimorphism = fct_recode(Sexual_dimorphism,
                                        "Feminized" = "Feminizado",
                                        "Masculinized" = "Masculinizado")) |>
  mutate(Stimulus = ifelse(Sexual_dimorphism == "Feminized", paste0(str_sub(str_replace(Stimulus, ".* -
                           ifelse(Sexual_dimorphism == "Masculinized", paste0(str_sub(str_replace(Stimul
                                  Stimulus)),
         Choice = ifelse(NMC == 0, "No", "Yes"))

## New names:
```

```
## * `Number_of_mouse_clicks` -> `Number_of_mouse_clicks...17`
## * `Time_to_first_mouse_click` -> `Time_to_first_mouse_click...18`
## * `Number_of_mouse_clicks` -> `Number_of_mouse_clicks...21`
## * `Time_to_first_mouse_click` -> `Time_to_first_mouse_click...22`
## Cuestionarios----
### Sin calcular puntajes totales de instrumentos, para ver consistencia interna
quests <- read_excel("Datos/Cuestionario Datos Sociodemográficos  (Disponibilidad) (respuestas) (1).xls
                     sheet = "Respuestas de formulario 1") |>
  select(-c(Invitado, `Servicios ayuda`, `Correos cierre`)) |>
  rename(Date = Fecha,
         Age = edad,
         City = Ciudad,
         Education = Escolaridad,
         Ethnicity = Etnia,
         Gender = Sexo,
         Sex = Genero,
         Sexual_orientation = OS,
         Relationship_current = "Pareja actual",
         Relationship_duration = DuracionR,
         Relationship_status = EstadoR,
         Partner_sex = SexoParejaActual,
         Partner_masculinity = Masculinidad_pareja,
         Partner_dominance = Dominancia_pareja,
         Partner_attractiveness = Atractivo_pareja,
         Number_of_children = NumHijos,
         Hormonal_contraception = "Anticonceptivos hormonales",
         Contraceptive = Cual_anticonceptivo,
         Last_mentruation = "Ultima menstruacion",
         Currently_pregnant = "Embarazo actual",
         Sexual_abuse = "Experiencia abuso sexual",
         Comments = comentarios1,
         Medical_history = "antecedentes medicos",
         SP_happiness = "AP felicidad",
         SP_financial_security = "AP seguridad economica",
         SP_money_control = "AP control dinero",
         SP_attractiveness = "AP atractivo",
         SP_self_confidence = "AP autoconfianza",
         SP_self_esteem = "AP autoestima",
         SP_health = "AP salud",
         Electricity = "SB electricidad",
         Internet_access = "SB internet",
         TV = "SB television",
         Internet_use = "Fr acceso internet",
         Hospital_access = "Acceso hospital",
         Freq_illness = "Fr enfermedades",
         Socioeconomic_level = "Estrato socioeconomico",
         Neighborhood = "Barrio de residencia",
         Perceived_neighborhood_safety= "Seguridad barrio",
         Perceived_city_safety = "Seguridad ciudad",
         Perceived_home_safety = "Seguridad hogar",
         Perceived_country_safety = "Seguridad país",
         Freq_robery = "Fr de robos",
         Men_perceived_as_danger_to_children = "Hombres peligrosos hijos",
```

```r
        Men_perceived_as_danger_to_partner = "Hombres peligrosos pareja",
        Partner_physical_violence = "VP fisica",
        Freq_partner_physical_violence = "Fr VP fisica",
        Partner_sexual_violence = "VP sexual",
        Freq_partner_sexual_violence = "Fr VP sexual",
        Partner_infidelity = "Infidelidad",
        Freq_partner_infidelity = "Fr infidelidad",
        Victim_of_violence = "Victima de alguna violencia",
        Violence_type = "Tipo violencia",
        Victim_of_gender_violence = "Victima violencia género",
        Victim_of_armed_conflict = "Victima conflicto armado",
        Control_question_1 = "Sin leer",
        Control_question_2 = "Broma") |>
  mutate(Education = factor(Education, levels = c("Primaria",
                                                 "Bachillerato",
                                                 "Universitario",
                                                 "Posgrado")),
         Sexual_orientation = factor(Sexual_orientation,
                                     levels = c("Exclusivamente heterosexual",
                                                "Principalmente heterosexual, con contactos homosexuales
                                                "Predominantemente heterosexual, aunque con contactos h
                                                "Bisexual",
                                                "Pansexual",
                                                "Demisexual")),
         Relationship_status = factor(Relationship_status,
                                      levels = c("Soltero sin contactos sexuales en el último año",
                                                 "Soltero con contactos sexuales en el último año",
                                                 "Relación exclusiva o matrimonio - viven juntos",
                                                 "Relación exclusiva - no viven juntos",
                                                 "Relación no exclusiva - contactos sexuales con otras
         Internet_use = factor(Internet_use,
                               levels = c("Cada día",
                                          "Cada mes",
                                          "Cada año")),
         Socioeconomic_level = as.factor(Socioeconomic_level),
         City = ifelse(City == "Bogotá D.C." |
                         City == "Madrid, Cundinamarca" |
                         City == "Zipaquirá, Cundinamarca" |
                         City == "Zipaquirá" |
                         City == "Mosquera, cundinamarca" |
                         City == "Mosquera" |
                         City == "FUNZA, CUNDINAMARCA" |
                         City == "Madrid Cundinamarca" |
                         City == "Une- Cundinamarca",
                       "Bogota Region",
                       ifelse(City == "Soledad" |
                                City == "Barranquilla" |
                                City == "BARRANQUILLA" |
                                City == "Soledad, Atlantico" |
                                City == "Costa Atlantica" |
                                City == "Corozal",
                              "Atlantico Region",
                              "Other"))) |>
```

```r
  mutate(Education = recode(Education,
                            "Primaria" =  "Primary school",
                            "Bachillerato" = "High school",
                            "Universitario" = "University",
                            "Posgrado" = "Postgraduate")) |>
  mutate(Sexual_orientation = recode(Sexual_orientation,
                                     "Exclusivamente heterosexual" = "Exclusively heterosexual",
                                     "Principalmente heterosexual, con contactos homosexuales esporádico
                                     "Predominantemente heterosexual, aunque con contactos homosexuales
                                     "Bisexual" = "Bisexual",
                                     "Pansexual" = "Pansexual",
                                     "Demisexual" = "Demisexual")) |>
  mutate(Relationship_status = recode(Relationship_status,
                                      "Soltero sin contactos sexuales en el último año" = "Single withou
                                      "Soltero con contactos sexuales en el último año" = "Single with
                                      "Relación exclusiva o matrimonio - viven juntos" = "Exclusive rel
                                      "Relación exclusiva - no viven juntos" = "Exclusive relationship
                                      "Relación no exclusiva - contactos sexuales con otras personas" =
  mutate(Internet_use = recode(Internet_use,
                               "Cada día" = "Daily",
                               "Cada mes" = "Monthly",
                               "Cada año" = "Yearly")) |>
  mutate(across(starts_with("Men_perceived_as_danger_to_"),
                ~recode(.,
                        "Completamente en desacuerdo" =  1,
                        "Ligeramente en desacuerdo" = 2,
                        "Ni de acuerdo ni en desacuerdo" = 3,
                        "Ligeramente deacuerdo" = 4,
                        "Completamente deacuerdo" = 5))) |>
  mutate(across(where(is.character), ~replace(., . == "Si" , "Yes"))) |>
  mutate(across(where(is.character), ~replace(., . == "Sí" , "Yes"))) |>
  mutate(across(where(is.character), ~replace(., . == "No quiero responder" , "Prefer not to answer")))
  mutate(across(where(is.character), ~replace(., . == "Mujer" , "Woman"))) |>
  mutate(across(where(is.character), ~replace(., . == "Hombre" , "Man"))) |>
  mutate(across(where(is.character), ~replace(., . == "Femenino" , "Female"))) |>
  mutate(across(where(is.character), ~replace(., . == "Masculino" , "Male"))) |>
  mutate(across(where(is.character), ~replace(., . == "Sin pareja actual" , "Single"))) |>
  mutate(across(where(is.character), ~replace(., . == "Sí, una vez en la adultez" , "Once as adult")))
  mutate(across(where(is.character), ~replace(., . == "Sí, tanto en la infancia como en la adultez" , "
  mutate(across(where(is.character), ~replace(., . == "Sí, más de una vez en mi infancia" , "More than
  mutate(across(where(is.character), ~replace(., . ==  "Sí, una vez e mi infancia" , "Once as child")))
  mutate(across(where(is.character), ~replace(., . ==  "Afrocolombiano" , "Afrocolombian"))) |>
  mutate(across(where(is.character), ~replace(., . ==  "Desplazado conflicto armado" , "Undetermined"))
  mutate(across(where(is.character), ~replace(., . ==  "Ninguna" , "Undetermined"))) |>
  mutate(across(where(is.character), ~replace(., . ==  "Comunidad negra" , "Afrocolombian"))) |>
  mutate(across(where(is.character), ~replace(., . ==  "Raizal del Archipiélago de San Andrés, Providen
  mutate(across(where(is.character), ~replace(., . ==  "Patos" , "Indigenous"))) |>
  mutate(across(where(is.character), ~replace(., . ==  "Indígena" , "Indigenous"))) |>
  mutate(across(where(is.character), ~replace(., . ==  "No estoy segura" , "Unsure")))


### Con puntajes totales de instrumentos, menos columnas
quests_clean <- quests |>
  mutate(across(starts_with("Escasez alimentaria"),
```

6

```r
                  ~recode(.,
                          "Nunca" =  0,
                          "Rara vez/algunas veces" = 1,
                          "Casi siempre" = 2))) |>
  rowwise() |>
  mutate(Self_esteem = sum(autoestima_I1, 5-autoestima_I2, autoestima_I3, autoestima_I4,
                           autoestima_I5, 5-autoestima_I6, autoestima_I7, 5-autoestima_I8,
                           5-autoestima_I9, autoestima_I10),
         Self_perception = sum(across(starts_with("SP_"))),
         Perceived_safety = sum(across(ends_with("_safety"))),
         Food_insecurity = sum(across(starts_with("Escasez alimentaria")))) |>
  select(!starts_with("autoestima_")) |>
  mutate(across(where(is.character), as.factor))

## Evaluación subjestiva de rostros----
### Formato ancho
eval <- read_excel("Datos/Evaluación subjetiva rostros (Respuestas).xlsx") |>
  select(-c(123:124)) |>
  rowwise() |>
  mutate(Masculinity_masculinized = sum(across(ends_with("M Mas"))),
         Masculinity_feminized = sum(across(ends_with("F Mas"))),
         Attractiveness_masculinized = sum(across(ends_with("M Atr"))),
         Attractiveness_feminized = sum(across(ends_with("F Atr")))) |>
  rename(Date = "Marca temporal",
         ID = "Escribe tu código de participante")
### Formato largo
eval_long <- left_join(eval |>
                         select(-c(123:126)) |>
                         select(!ends_with(" Mas")) |>
                         pivot_longer(cols = ends_with("Atr"),
                                      names_to = "Stimulus",
                                      values_to = "Attractiveness") |>
                         mutate(Stimulus = str_remove_all(Stimulus, " Atr")),
                       eval |>
                         select(-c(123:126)) |>
                         select(!ends_with(" Atr")) |>
                         pivot_longer(cols = ends_with("Mas"),
                                      names_to = "Stimulus",
                                      values_to = "Masculinity") |>
                         mutate(Stimulus = str_remove_all(Stimulus, " Mas")))

## Joining with `by = join_by(Date, ID, Stimulus)`
## Disponibilidad de recursos----
reg <- rbind(read_excel("Datos/3Registro Participantes Disponibilidad de Recursos-corregido.xlsx",
                        sheet = "UB") |>
               mutate(University = "UB"),
             read_excel("Datos/3Registro Participantes Disponibilidad de Recursos-corregido.xlsx",
                        sheet = "CUC") |>
               mutate(University = "CUC")) |>
  select(-c(Grupo, `Entrega de kit`, `Protocolo de bioseguridad`, `Requisitos previos al registro`, Cons
           `Código de evaluador`:`Código auxiliar que reclutó`)) |>
  rename(Date = "Fecha de registro",
         ID = "Codigo del Participante",
```

```r
        Condition = "Condicion",
        Calibration = "Calibración",
        Gaze_perc = "% Gaze",
        Condition_happiness = "Q Feliz",
        Condition_physical_safety = "Q Segura físicamente",
        Condition_healthy = "Q Saludable",
        Condition_economic_security = "Q Segura económicamente",
        Body_temperature = "Temperatura",
        Ovulating = "Test de ovulación",
        Saliva_pre = "Recolección de saliva pre",
        Saliva_pre_time = "Hora...18",
        Eye_tracking = "Rastreo Ocular",
        Subjective_evaluation = "Evaluación subjetiva",
        Sociodemographic_questionnaire = "Cuestionario sociodemográfico",
        Saliva_post = "Recolección de saliva post",
        Saliva_post_time = "Hora...23",
        Notes = "Observaciones") |>
  mutate(Condition = fct_recode(Condition,
                                "Low" = "Baja",
                                "High" = "Alta"),
         Calibration = fct_recode(Calibration,
                                  "<=0.5" = "<0.5 (menor a 0.5)",
                                  ">0.5" = ">0.5 (mayor a 0.5)",
                                  "<=0.5" = "0.5 (igual a 0.5)",
                                  NULL = "Selecciona"),
         Ovulating = fct_recode(as.factor(Ovulating),
                                "No" = "0",
                                "Yes" = "1")) |>
  mutate_all(~str_replace_all(., "SI", "Yes")) |>
  mutate_all(~str_replace_all(., "NO", "No")) |>
  mutate_all(~str_replace_all(., "INCOMPLETO", "No")) |>
  mutate_all(~str_replace_all(., "Recuperado", "Data recovered")) |>
  mutate_all(~str_replace_all(., "RECUPERADO", "Data recovered")) |>
  mutate_all(~na_if(., "Selecciona")) |>
  mutate_all(~na_if(., "N/A")) |>
  mutate(across(starts_with("Condition_"), as.numeric))
```

```
## New names:
## New names:
## * `Hora` -> `Hora...18`
## * `Hora` -> `Hora...23`
```

```r
# Base de datos final----
## Integrada----
dat_int <- dat_et |>
  left_join(quests_clean, by = c("ID"), multiple = "all") |>
  left_join(eval_long, by = c("ID", "Stimulus"), multiple = "all") |>
  left_join(reg, by = c("ID", "University", "Condition"), multiple = "all")


### Tamaño de muestra----
n_recolectado <- dat_int |>
  summarise(n = n_distinct(ID))


## Base de datos filtrada----
```

```r
dat <- dat_int |>
  filter(Control_question_1 == "No" & Control_question_2 == "No") |>
  filter(Sexual_orientation %in%
           c("Exclusively heterosexual",
             "Predominantly heterosexual"))

### Tamaño de muestra----
n_filtrado <- dat |>
  summarise(n = n_distinct(ID))

## Bases filtradas individuales----
### Disponibilidad de recursos----
reg_fin <- reg |>
  left_join(quests_clean, by = c("ID")) |>
  filter(ID %in% unique(dat$ID))

## Cuestionarios---
quests_fin <- quests_clean |>
  filter(ID %in% unique(dat$ID))

# Descriptivos----
## Sociodemographic----
desc_quest <- quests_fin |>
  left_join(reg, by = c("ID")) |>
  select(ID, Condition, Age, City, Education, Ethnicity, Sexual_orientation, Relationship_current,
         Relationship_status:Hormonal_contraception, Sexual_abuse,
         SP_happiness:Socioeconomic_level,
         Perceived_country_safety:Freq_robery,
         Men_perceived_as_danger_to_children:Victim_of_violence,
         Victim_of_gender_violence:Victim_of_armed_conflict,
         Self_esteem:Food_insecurity) |>
  mutate(across(where(is.character), as.factor))

### Sociodemographic numeric----
desc_quest |>
  select(ID, Condition, where(is.numeric)) |>
  pivot_longer(where(is.numeric),
               names_to = "Variable",
               values_to = "Value") |>
  mutate(Variable = str_replace_all(Variable, "_", " ")) |>
  mutate(Variable = str_replace_all(Variable, "Freq", "Frequency of")) |>
  mutate(Variable = str_replace_all(Variable, "SP", "Self-perceived")) |>
  #mutate(Variable = case_when(str_detect(Variable, "_safety") ~ str_replace_all(Variable, "Self-percei
  ggplot(aes(x = Value, fill = Condition, color = Condition)) +
  geom_density(alpha = 0.3) +
  facet_wrap(~Variable, scales = "free") +
  stat_summary(aes(xintercept = after_stat(x), y = 0),
               fun = mean, geom = "vline", orientation = "y") +
  labs(x = NULL, y = "Density")
```
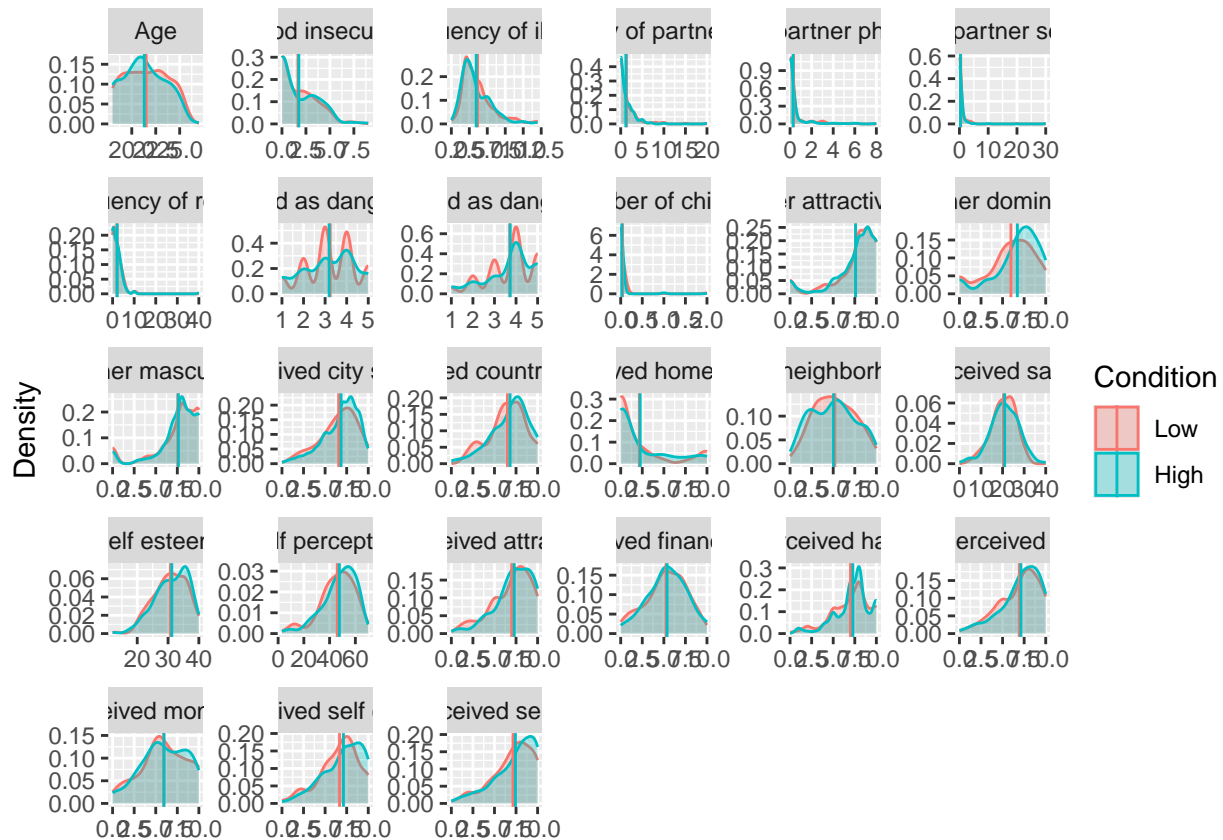
```
## Warning: Removed 1 row containing non-finite outside the scale range
## ('stat_density()').

## Warning: Removed 1 row containing non-finite outside the scale range
```

Density

Condition
- Low
- High

```r
### Sociodemographic categorical----
desc_quest |>
  select(ID, Condition, where(is.factor), City) |>
  pivot_longer(City:Victim_of_armed_conflict,
               names_to = "Variable",
               values_to = "Value") |>
  mutate(Variable = str_replace_all(Variable, "_", " ")) |>
  ggplot(aes(y = Value, fill = Condition, color = Condition)) +
  geom_bar(alpha = 0.3, position = position_dodge()) +
  geom_text(aes(label = scales::percent(after_stat(prop), accuracy = 0.1)),
            vjust = "inward",
            position = position_dodge(.9),
            stat = "prop",
            color = "black",
            size = 2.5) +
  facet_wrap(~Variable, scales = "free") +
  scale_y_discrete(labels = label_wrap(20)) +
  theme(axis.text.y = element_text(size = 8)) +
  labs(x = NULL, y = "Count")
```

Count

Condition
- Low
- High
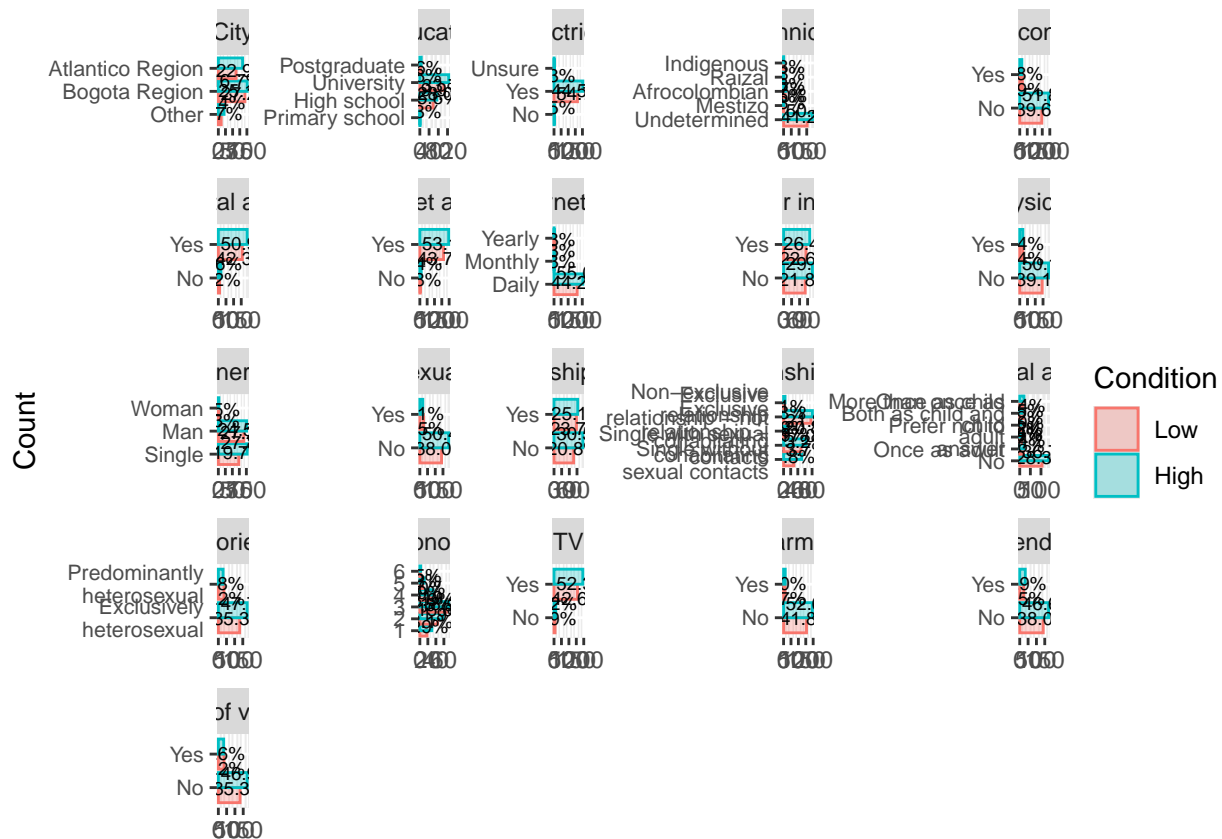
```r
## Sociodemographic factors----
ggarrange(desc_quest |>
            select(ID, Condition, Age, Number_of_children) |>
            pivot_longer(where(is.numeric),
                         names_to = "Variable",
                         values_to = "Value") |>
            mutate(Variable = str_replace_all(Variable, "_", " ")) |>
            ggplot(aes(x = Value, fill = Condition, color = Condition)) +
            geom_density(alpha = 0.3) +
            facet_wrap(~Variable, scales = "free", ncol = 1) +
            stat_summary(aes(xintercept = after_stat(x), y = 0),
                         fun = mean, geom = "vline", orientation = "y") +
            labs(x = NULL, y = NULL),
          desc_quest |>
            select(ID, Condition, Sexual_orientation, City, Ethnicity,
                   Education, Relationship_current, Relationship_status) |>
            pivot_longer(Sexual_orientation:Relationship_status,
                         names_to = "Variable",
                         values_to = "Value") |>
            mutate(Variable = str_replace_all(Variable, "_", " ")) |>
            ggplot(aes(y = Value, fill = Condition, color = Condition)) +
            geom_bar(alpha = 0.3, position = position_dodge()) +
            geom_text(aes(label = scales::percent(after_stat(prop), accuracy = 0.1)),
                      vjust = "inward",
                      position = position_dodge(.9),
                      stat = "prop",
```

```
                color = "black",
                size = 2.5) +
      facet_wrap(~Variable, scales = "free") +
      scale_y_discrete(labels = label_wrap(20)) +
      theme(axis.text.y = element_text(size = 8)) +
      labs(x = NULL, y = NULL),
    widths = c(1, 3),
    common.legend = TRUE,
    legend = "bottom",
    labels = "auto")
```
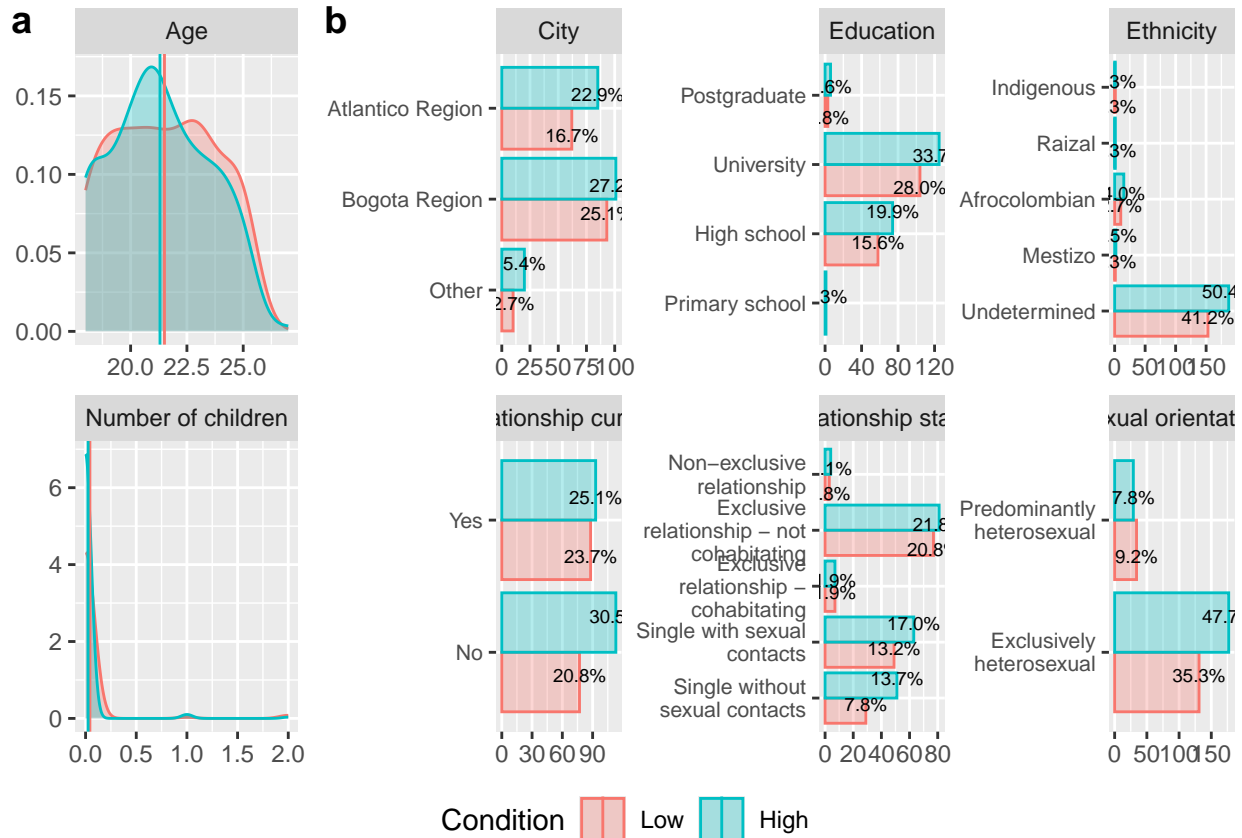


```
## Access to resources factors----
ggarrange(desc_quest |>
        select(ID, Condition, Freq_illness) |>
        pivot_longer(Freq_illness,
                names_to = "Variable",
                values_to = "Value") |>
        mutate(Variable = str_replace_all(Variable, "_", " ")) |>
        mutate(Variable = str_replace_all(Variable, "Freq", "Frequency of")) |>
        ggplot(aes(x = Value, fill = Condition, color = Condition)) +
        geom_density(alpha = 0.3) +
        facet_wrap(~Variable,
                labeller = labeller(c("Frequency of illness"))) +
        stat_summary(aes(xintercept = after_stat(x), y = 0),
                fun = mean, geom = "vline", orientation = "y") +
        labs(x = NULL, y = NULL),
```
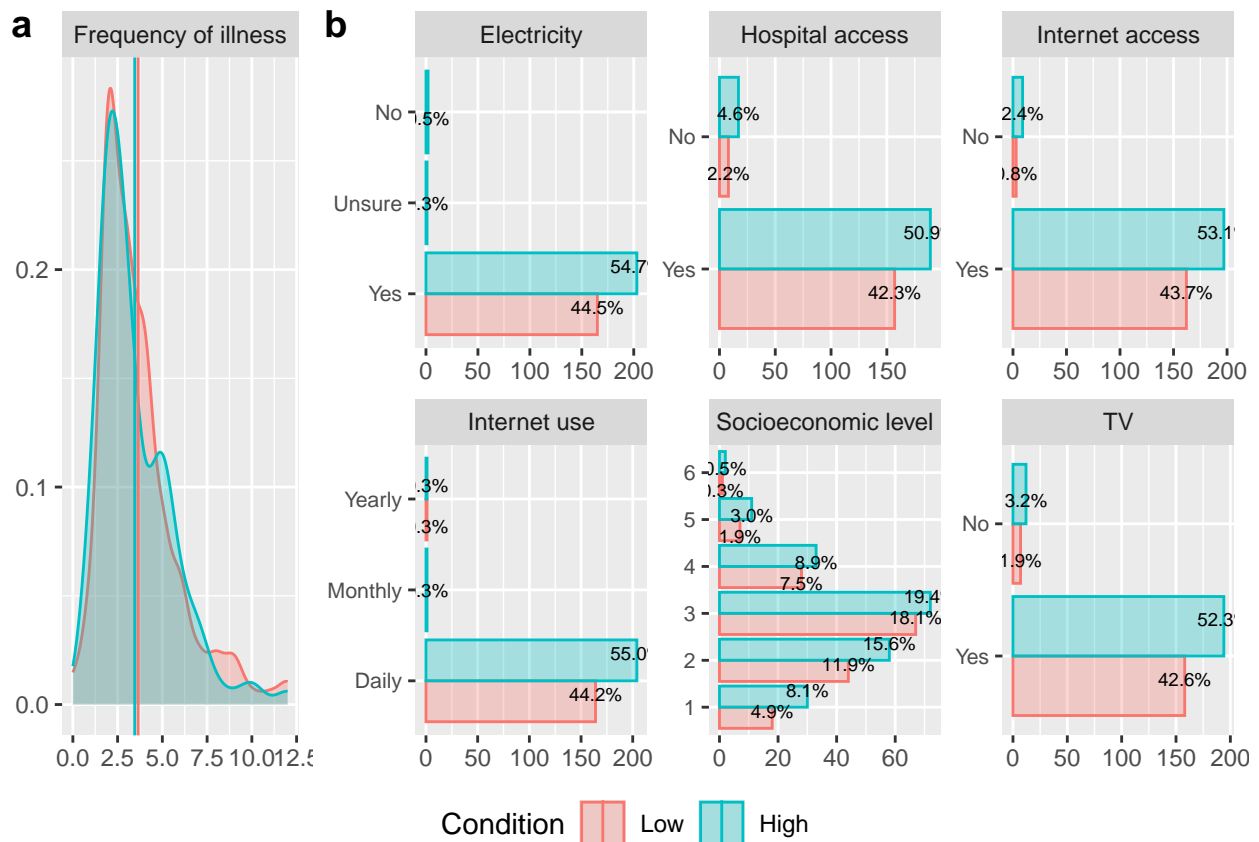
```
desc_quest |>
  select(ID, Condition, Socioeconomic_level, Electricity, Internet_access, Internet_use,
         TV, Hospital_access) |>
  pivot_longer(Socioeconomic_level:Hospital_access,
               names_to = "Variable",
               values_to = "Value") |>
  mutate(Variable = str_replace_all(Variable, "_", " ")) |>
  ggplot(aes(y = Value, fill = Condition, color = Condition)) +
  geom_bar(alpha = 0.3, position = position_dodge()) +
  geom_text(aes(label = scales::percent(after_stat(prop), accuracy = 0.1)),
            vjust = "inward",
            position = position_dodge(.9),
            stat = "prop",
            color = "black",
            size = 2.5) +
  facet_wrap(~Variable, scales = "free") +
  scale_y_discrete(labels = label_wrap(20)) +
  theme(axis.text.y = element_text(size = 8)) +
  labs(x = NULL, y = NULL),
widths = c(1, 3),
common.legend = TRUE,
legend = "bottom",
labels = "auto")
```
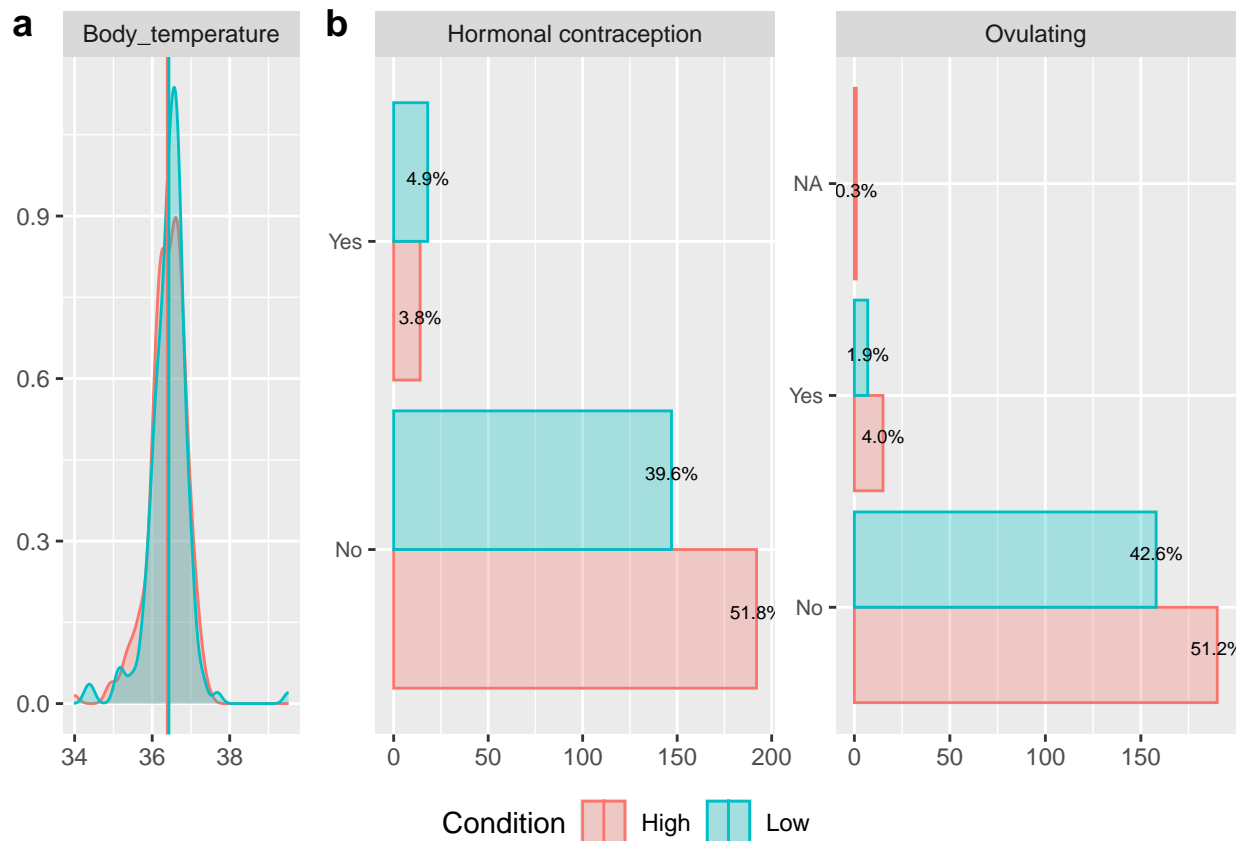


```
## Hormonal factors----
ggarrange(reg_fin |>
```

```r
    select(ID, Condition, Body_temperature) |>
    pivot_longer(Body_temperature,
                 names_to = "Variable",
                 values_to = "Value") |>
    mutate(Value = as.numeric(Value)) |>
    ggplot(aes(x = Value, fill = Condition, color = Condition)) +
    geom_density(alpha = 0.3) +
    facet_wrap(~Variable) +
    stat_summary(aes(xintercept = after_stat(x), y = 0),
                 fun = mean, geom = "vline", orientation = "y") +
    labs(x = NULL, y = NULL),
  reg_fin |>
    left_join(desc_quest, by = c("ID", "Condition", "Hormonal_contraception")) |>
    select(ID, Condition, Ovulating, Hormonal_contraception) |>
    pivot_longer(Ovulating:Hormonal_contraception,
                 names_to = "Variable",
                 values_to = "Value") |>
    mutate(Variable = str_replace_all(Variable, "_", " ")) |>
    ggplot(aes(y = Value, fill = Condition, color = Condition)) +
    geom_bar(alpha = 0.3, position = position_dodge()) +
    geom_text(aes(label = scales::percent(after_stat(prop), accuracy = 0.1)),
              vjust = "inward",
              position = position_dodge(.9),
              stat = "prop",
              color = "black",
              size = 2.5) +
    facet_wrap(~Variable, scales = "free") +
    scale_y_discrete(labels = label_wrap(20)) +
    theme(axis.text.y = element_text(size = 8)) +
    labs(x = NULL, y = NULL),
  widths = c(1, 3),
  common.legend = TRUE,
  legend = "bottom",
  labels = "auto")
```
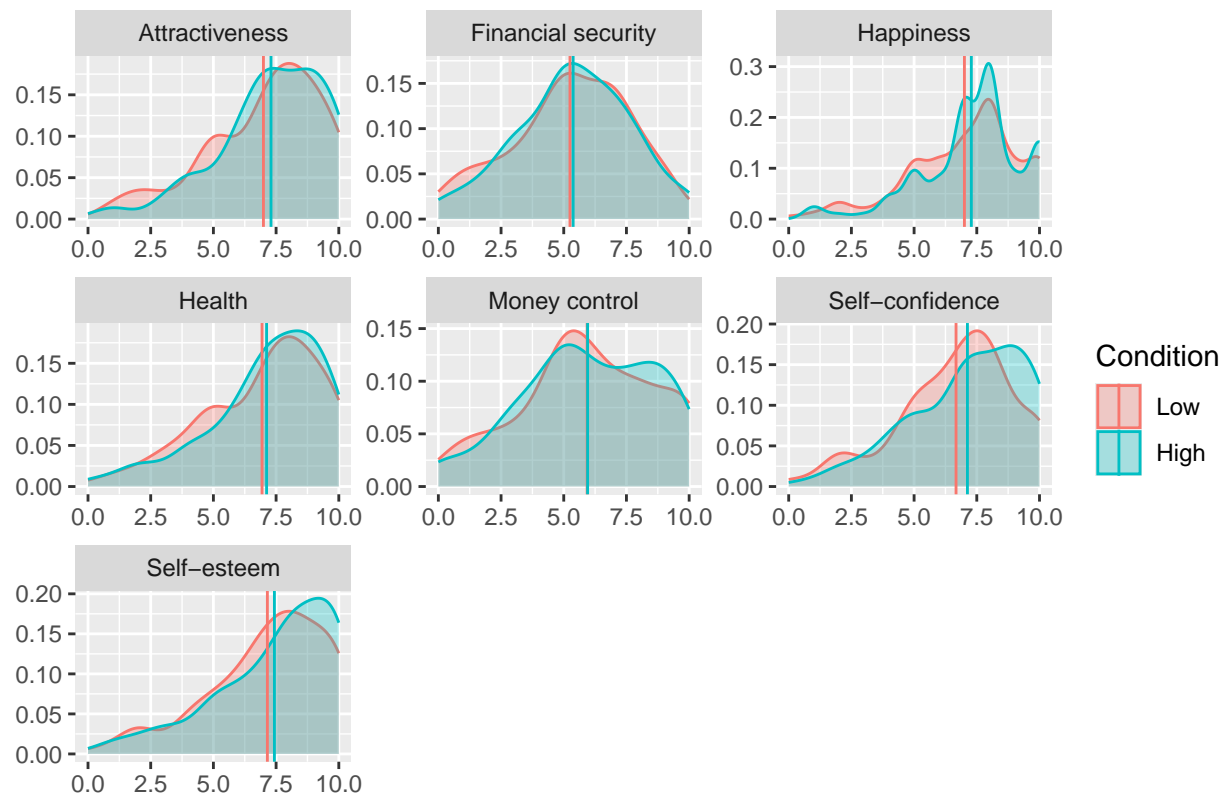
```
## Psychological factors----
desc_quest |>
  select(ID, Condition, starts_with("SP_")) |>
  pivot_longer(where(is.numeric),
               names_to = "Variable",
               values_to = "Value") |>
  mutate(Variable = str_replace_all(Variable, "SP_", "")) |>
  mutate(Variable = str_replace_all(Variable, "self_", "self-")) |>
  mutate(Variable = str_replace_all(Variable, "_", " ")) |>
  mutate(Variable = str_to_sentence(Variable)) |>
  ggplot(aes(x = Value, fill = Condition, color = Condition)) +
  geom_density(alpha = 0.3) +
  labs(title = "Self-perceived conditions") +
  facet_wrap(~Variable, scales = "free") +
  stat_summary(aes(xintercept = after_stat(x), y = 0),
               fun = mean, geom = "vline", orientation = "y") +
  labs(x = NULL, y = NULL)
```

Self−perceived conditions


```
## Last partner perception----
desc_quest |>
  select(ID, Condition, Partner_masculinity, Partner_dominance,
         Partner_attractiveness) |>
  pivot_longer(where(is.numeric),
               names_to = "Variable",
               values_to = "Value") |>
  mutate(Variable = str_replace_all(Variable, "Partner_", "")) |>
  mutate(Variable = str_to_sentence(Variable)) |>
  ggplot(aes(x = Value, fill = Condition, color = Condition)) +
  geom_density(alpha = 0.3) +
  labs(title = "Current/last partner perception") +
  facet_wrap(~Variable, scales = "free") +
  stat_summary(aes(xintercept = after_stat(x), y = 0),
               fun = mean, geom = "vline", orientation = "y") +
  labs(x = NULL, y = NULL)
```

Current/last partner perception


```
## Factors related con context violence----
ggarrange(desc_quest |>
            select(ID, Condition, ends_with("_safety"), Freq_robery) |>
            pivot_longer(where(is.numeric),
                        names_to = "Variable",
                        values_to = "Value") |>
            mutate(Value = as.numeric(Value)) |>
            mutate(Variable = str_replace_all(Variable, "_safety", "")) |>
            mutate(Variable = str_replace_all(Variable, "Perceived_", "")) |>
            mutate(Variable = str_replace_all(Variable, "Freq_", "Frequency of ")) |>
            mutate(Variable = str_replace_all(Variable, "Perceived", "General perception")) |>
            mutate(Variable = str_to_sentence(Variable)) |>
            ggplot(aes(x = Value, fill = Condition, color = Condition)) +
            geom_density(alpha = 0.3) +
            labs(title = "Safety perception") +
            facet_wrap(~factor(Variable, c("Country", "City", "Neighborhood", "Home",
                                            "Frequency of robery", "General perception")),
                        scales = "free") +
            stat_summary(aes(xintercept = after_stat(x), y = 0),
                        fun = mean, geom = "vline", orientation = "y") +
            labs(x = NULL, y = NULL),
        ggarrange(desc_quest |>
                    select(ID, Condition,
                            Men_perceived_as_danger_to_children,
                            Men_perceived_as_danger_to_partner) |>
                    pivot_longer(Men_perceived_as_danger_to_children:Men_perceived_as_danger_to_partne
```
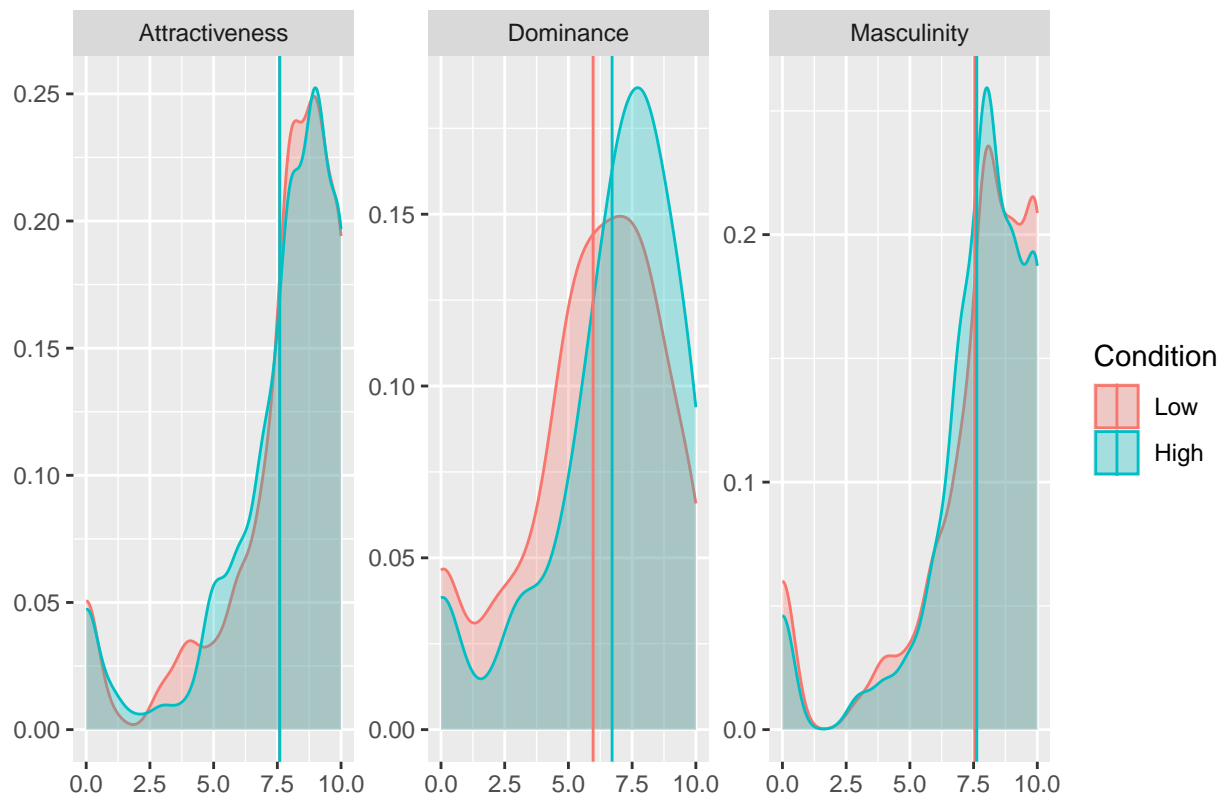
```r
                          names_to = "Variable",
                          values_to = "Value") |>
              mutate(Value = as.factor(Value)) |>
              mutate(Variable = str_replace_all(Variable,
                                                "Men_perceived_as_danger_to_", "")) |>
              mutate(Variable = str_to_sentence(Variable)) |>
              ggplot(aes(y = Value, fill = Condition, color = Condition)) +
              geom_bar(alpha = 0.3, position = position_dodge()) +
              geom_text(aes(label = scales::percent(after_stat(prop), accuracy = 0.1)),
                        vjust = "inward",
                        position = position_dodge(.9),
                        stat = "prop",
                        color = "black",
                        size = 2.5) +
              labs(title = "Men perceived as danger to...") +
              facet_wrap(~Variable, scales = "free") +
              scale_y_discrete(labels = label_wrap(20)) +
              theme(axis.text.y = element_text(size = 8)) +
              labs(x = NULL, y = NULL),
            desc_quest |>
              select(ID, Condition, Victim_of_armed_conflict) |>
              pivot_longer(Victim_of_armed_conflict,
                           names_to = "Variable",
                           values_to = "Value") |>
              mutate(Variable = str_replace_all(Variable,
                                                "_", " ")) |>
              ggplot(aes(y = Value, fill = Condition, color = Condition)) +
              geom_bar(alpha = 0.3, position = position_dodge()) +
              geom_text(aes(label = scales::percent(after_stat(prop), accuracy = 0.1)),
                        vjust = "inward",
                        position = position_dodge(.9),
                        stat = "prop",
                        color = "black",
                        size = 2.5) +
              labs(title = "Victim of armed conflict") +
              facet_wrap(~Variable, scales = "free") +
              scale_y_discrete(labels = label_wrap(20)) +
              theme(axis.text.y = element_text(size = 8)) +
              labs(x = NULL, y = NULL),
            ncol = 1,
            labels = c("", "c")),
        #widths = c(2, 1),
        common.legend = TRUE,
        legend = "bottom",
        labels = "auto")
```
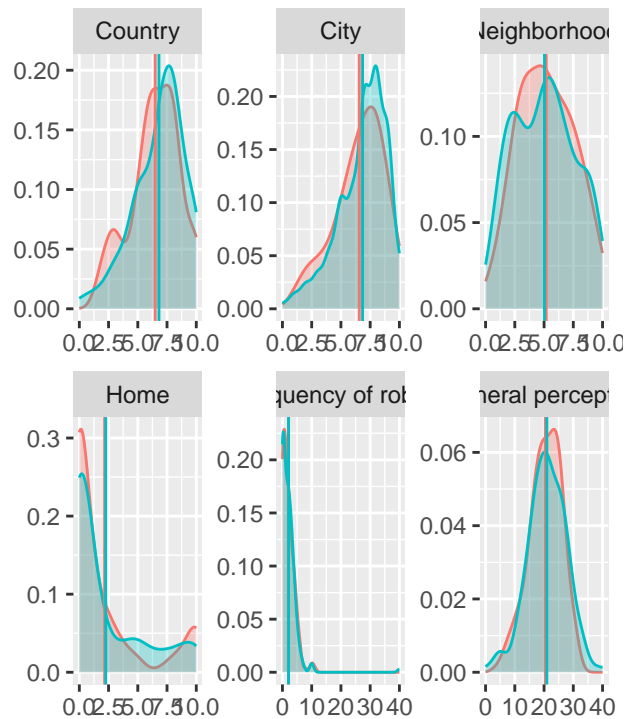
```
## Warning: Removed 1 row containing non-finite outside the scale range (`stat_density()`).
## Removed 1 row containing non-finite outside the scale range (`stat_summary()`).

## Warning: Removed 1 row containing non-finite outside the scale range
## (`stat_density()`).

## Warning: Removed 1 row containing non-finite outside the scale range
## (`stat_summary()`).
```
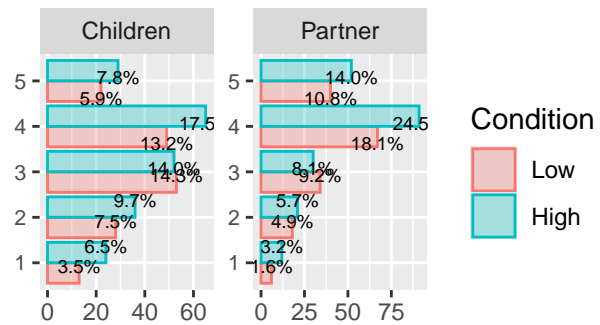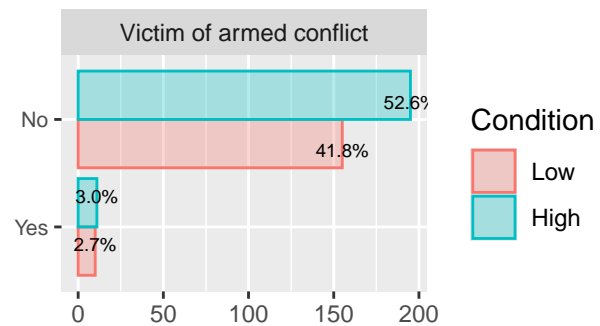
a Safety perception

b Men perceived as danger to...

c Victim of armed conflict

Condition: Low, High

```r
## Factors related con gender and partner violence----
ggarrange(desc_quest |>
          select(ID, Condition, Freq_partner_physical_violence:Freq_partner_infidelity) |>
          pivot_longer(where(is.numeric),
                       names_to = "Variable",
                       values_to = "Value") |>
          mutate(Value = as.numeric(Value)) |>
          mutate(Variable = str_replace_all(Variable, "Freq_partner_", "")) |>
          mutate(Variable = str_replace_all(Variable, "_", " ")) |>
          mutate(Variable = str_to_sentence(Variable)) |>
          ggplot(aes(x = Value, fill = Condition, color = Condition)) +
          geom_density(alpha = 0.3) +
          facet_wrap(~factor(Variable, c("Physical violence",
                                         "Sexual violence",
                                         "Infidelity")),
                     scales = "free", ncol = 1) +
          stat_summary(aes(xintercept = after_stat(x), y = 0),
                       fun = mean, geom = "vline", orientation = "y") +
          labs(x = NULL, y = NULL),
          desc_quest |>
            select(ID, Condition,
                   Victim_of_gender_violence,
                   Partner_physical_violence,
                   Partner_sexual_violence,
                   Sexual_abuse) |>
            pivot_longer(Victim_of_gender_violence:Sexual_abuse,
```

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```
                    names_to = "Variable",
                    values_to = "Value") |>
        mutate(Value = as.factor(Value)) |>
        mutate(Variable = str_replace_all(Variable,
                                           "_", " ")) |>
        mutate(Variable = str_to_sentence(Variable)) |>
        ggplot(aes(y = Value, fill = Condition, color = Condition)) +
        geom_bar(alpha = 0.3, position = position_dodge()) +
        geom_text(aes(label = scales::percent(after_stat(prop), accuracy = 0.1)),
                vjust = "inward",
                position = position_dodge(.9),
                stat = "prop",
                color = "black",
                size = 2.5) +
        facet_wrap(~Variable,
                 scales = "free") +
        scale_y_discrete(labels = label_wrap(20)) +
        theme(axis.text.y = element_text(size = 8)) +
        labs(x = NULL, y = NULL),
      widths = c(1, 2),
      common.legend = TRUE,
      legend = "bottom",
      labels = "auto")
```



```
## Subjective evaluation----
eval_long |>
```

```
left_join(reg, by = c("ID")) |>
filter(ID %in% unique(dat$ID)) |>
rowwise() |>
mutate(Sexual_dimorphism = ifelse(grepl("F", Stimulus), "Feminine", "Masculine")) |>
select(Condition, Sexual_dimorphism, Attractiveness, Masculinity) |>
pivot_longer(Attractiveness:Masculinity,
             names_to = "Variable",
             values_to = "Value") |>
ggplot(aes(x = Value, fill = Sexual_dimorphism, color = Sexual_dimorphism)) +
geom_density(alpha = 0.3) +
facet_grid(Condition~Variable, scales = "free") +
stat_summary(aes(xintercept = after_stat(x), y = 0),
             fun = mean, geom = "vline", orientation = "y")
```
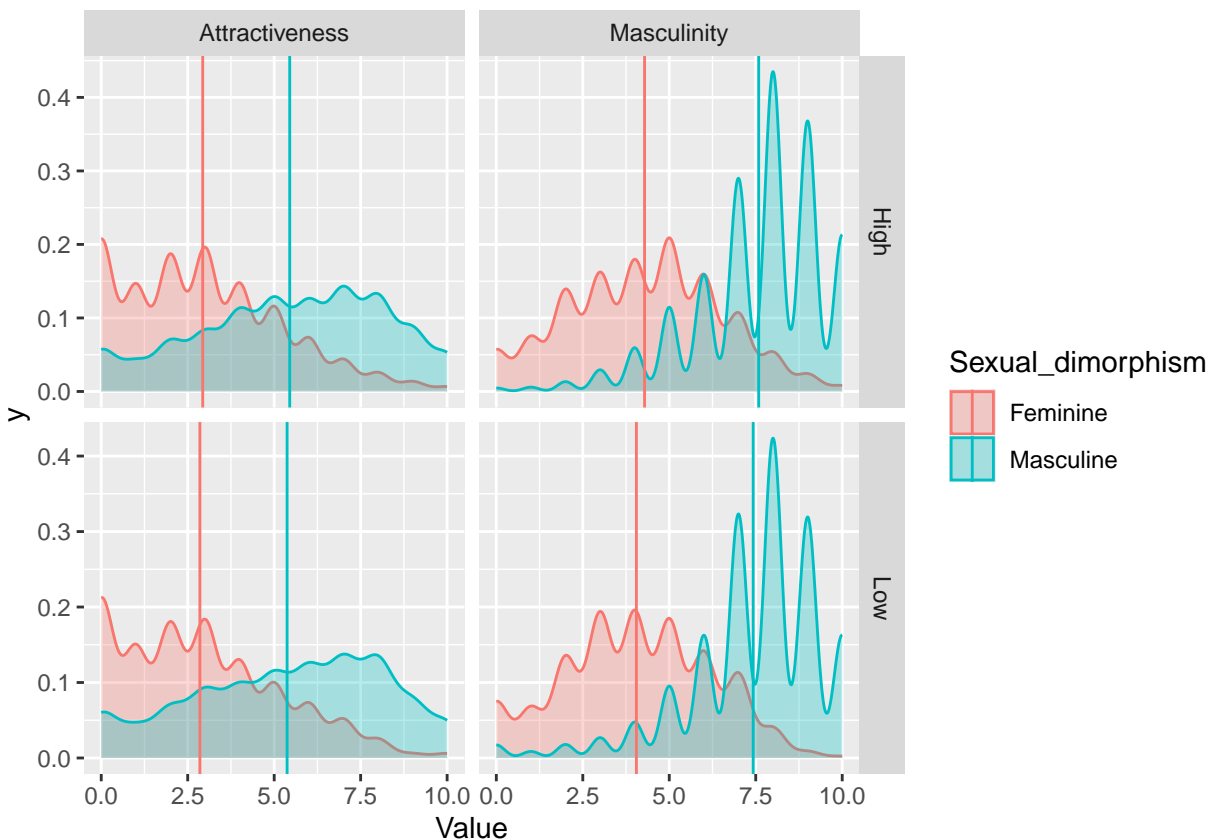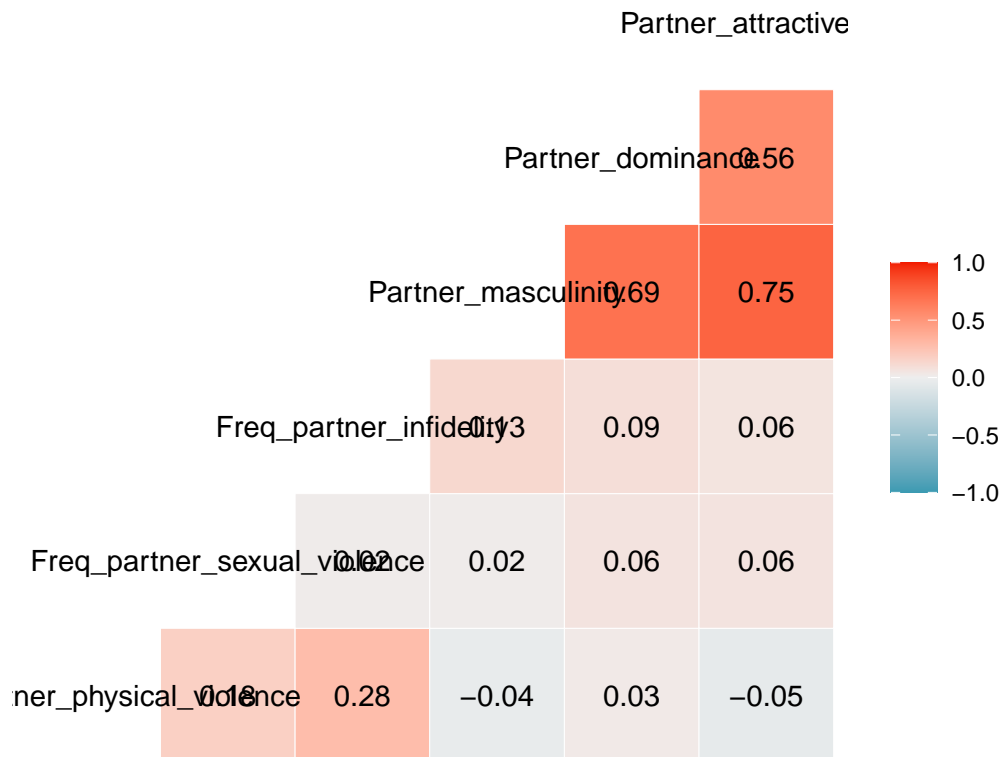


```
## Correlations----
### Correlations in partner perceptions----
quests_fin |>
  select(Freq_partner_physical_violence,
         Freq_partner_sexual_violence,
         Freq_partner_infidelity,
         Partner_masculinity,
         Partner_dominance,
         Partner_attractiveness) |>
  ggcorr(label = TRUE,
         label_round = 2)
```

		Partner_attractive
Partner_dominance		0.56
Partner_masculinity	0.69	0.75
Freq_partner_infidelity	0.13	0.09	0.06
Freq_partner_sexual_violence	0.02	0.02	0.06	0.06
...ner_physical_violence	0.18	0.28	−0.04	0.03	−0.05

```
### Correlations table----
desc_quest |>
  left_join(reg_fin |>
              select(ID, Body_temperature),
            by = c("ID")) |>
  select(Age,
         Freq_illness,
         starts_with("SP_"),
         Partner_masculinity, Partner_dominance, Partner_attractiveness,
         ends_with("_safety"), Freq_robery,
         Freq_partner_physical_violence,
         Freq_partner_sexual_violence,
         Freq_partner_infidelity) |>
  rename_with(~str_replace_all(., "_", " ")) |>
  rename_with(~str_replace_all(., "Freq", "Frequency of")) |>
  rename_with(~str_replace_all(., "Frequency of partner", "Partner")) |>
  rename_with(~str_replace_all(., "SP ", "")) |>
  rename_with(~str_replace_all(., "Perceived ", "")) |>
  rename_with(~str_to_sentence(.)) |>
  corr.stars() |>
  rownames_to_column(var = " ") |>
  slice(-1) |>
  kable(digits = 2,
        booktabs = TRUE,
        align = c("l", rep("c", 22)),
        linesep = "",
```

```
        caption = "Correlations between XXXXXX",
        escape = FALSE) |>
  kable_styling(latex_options = c("HOLD_position"),
                font_size = 5) |>
  column_spec(1, width = "1.2cm") |>
  column_spec(2:23, width = "0.7cm") |>
  add_header_above(c(" ",
                     "Age" = 1,
                     "Health" = 1,
                     "Self-perceived conditions" = 7,
                     "Current/last partner\nperception" = 3,
                     "Perceived context\nviolence" = 6,
                     "Frequency of partner\nviolence" = 2),
                   bold = TRUE) |>
  footnote(general = paste0("Values represent Pearson correlation coefficients ($r$). ",
                            "For significance, $^{\\\\dagger}p$ < 0.1, *$p$ < 0.05, ",
                            "**$p$ < 0.01, ***$p$ < 0.001. ",
                            "Significant correlations are in bold."),
           threeparttable = TRUE,
           footnote_as_chunk = TRUE,
           escape = FALSE) |>
  landscape()
```

```
## Loading required package: Hmisc
##
## Attaching package: 'Hmisc'
##
## The following objects are masked from 'package:dplyr':
##
##     src, summarize
##
## The following objects are masked from 'package:base':
##
##     format.pval, units
```

Table 1: Correlations between XXXXXX

	Age	Health	Self-perceived conditions							Current/last partner perception			Perceived context violence					Frequency of partner violence		
	Age	Frequency of illness	Happiness	Financial security	Money control	Attractiveness	Self confidence	Self esteem	Health	Partner masculinity	Partner dominance	Partner attractiveness	Country safety	City safety	Neighborhood safety	Home safety	Safety	Frequency of robery	Partner physical violence	Partner sexual violence
Frequency of illness	-0.05																			
Happiness	-0.06	**-0.18*****																		
Financial security	**-0.11***	-0.03	**0.55*****																	
Money control	0.03	**-0.17****	**0.46*****	**0.59*****																
Attractiveness	-0.03	**-0.18*****	**0.65*****	**0.44*****	**0.48*****															
Self confidence	-0.05	**-0.24*****	**0.7*****	**0.46*****	**0.48*****	**0.86*****														
Self esteem	-0.04	**-0.25*****	**0.72*****	**0.46*****	**0.5*****	**0.83*****	**0.92*****													
Health	-0.02	**-0.26*****	**0.68*****	**0.44*****	**0.44*****	**0.66*****	**0.7*****	**0.72*****												
Partner masculinity	**0.15****	**-0.09†**	**0.15****	**0.17*****	**0.16****	**0.21*****	**0.21*****	**0.23*****	**0.17*****											
Partner dominance	0.06	-0.06	**0.12***	**0.18*****	**0.12***	**0.17*****	**0.14****	**0.16****	**0.1***	**0.69*****										
Partner attractiveness	**0.14****	-0.05	**0.16****	**0.16****	**0.18*****	**0.18*****	**0.18*****	**0.21*****	**0.16****	**0.75*****	**0.56*****									
Country safety	0.00	-0.02	**0.13***	-0.02	0.03	**0.18*****	**0.17****	**0.17****	**0.12***	-0.04	0.02	-0.09								
City safety	0.01	-0.02	**0.13***	0.01	0.03	**0.18*****	**0.17****	**0.17****	**0.13***	-0.06	0.00	-0.08	**0.8*****							
Neighborhood safety	0.08	-0.04	0.06	**-0.12***	-0.04	**0.09†**	0.07	0.06	0.01	0.03	-0.02	-0.03	**0.27*****	**0.33*****						
Home safety	-0.02	-0.05	-0.01	0.01	-0.06	-0.01	-0.01	-0.02	-0.04	0.06	0.02	0.02	**-0.24*****	**-0.27*****	**0.32*****					
Safety	0.02	-0.06	**0.11***	-0.05	-0.03	**0.15****	**0.14****	**0.13***	0.07	0.01	0.01	-0.06	**0.61*****	**0.61*****	**0.79*****	**0.48*****				
Frequency of robery	-0.07	**0.09†**	-0.06	-0.03	-0.06	**-0.1***	**-0.1†**	**-0.13***	**-0.13***	0.00	-0.03	0.02	0.03	0.03	**0.1***	0.08	**0.1***			
Partner physical violence	**0.19*****	0.05	-0.07	-0.04	-0.07	-0.03	**-0.09†**	**-0.1†**	**-0.12***	-0.04	0.03	-0.05	0.07	0.05	0.06	0.01	0.07	0.02		
Partner sexual violence	0.06	-0.06	0.06	0.04	0.00	0.07	0.03	0.03	0.05	0.02	0.06	0.06	0.04	**0.09†**	-0.02	-0.08	0.00	0.07	**0.18*****	
Partner infidelity	**0.23*****	0.00	-0.04	-0.07	-0.03	0.07	0.02	-0.03	-0.08	**0.13***	**0.09†**	0.06	0.07	0.06	0.09	0.01	0.09	0.00	**0.28*****	0.02

Note: Values represent Pearson correlation coefficients (r). For significance, $^†p < 0.1$, $^*p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$. Significant correlations are in bold.