

report

G, Tenacidad, Perfeccionismo: Group Differences and Correlation Analyses.

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DIFFERENCES AMONG GROUPS

ANOVAS FOR CATEGORICAL INFORMATION

1. INCLUDING CAPACITY.

2. Analyses of influence of categorical variables, groups, to G Tenaci and Perfec.

COMPUTE ANALYSES AND GRAPHICS

```
categorical_results <- merged_lm_responses_to_predictors(scores_grit_esfuer_preoc, categorical_info, th  
side = 1, cex = 0.5, pch = 1.1, alpha = 1/3, size = 1.1)
```

```
## $fG
## $fG$escuela
##          xcepac xprimcongreso  xsecaugusto
## 8.453539e-16 6.966841e-03 1.962082e-07
##
## $fG$grado
##          x1b          x2a          x3a          x3b          x6          x8
## 0.002125176 0.002636762 0.001098538 0.004825131 0.034494787 0.037487880
##          x9
## 0.046386617
##
## $fG$ciudad
##          xcdmx xguadalajara
## 6.772918e-11 9.875281e-36
##
## $fG$capacidad
## [1] 2.005137e-17
##
##
## $Tenaci
## $Tenaci$escuela
## xprimcongreso
## 0.006709368
##
## $Tenaci$grado
##          x6a          x6c
## 0.009994055 0.003121953
##
## $Tenaci$ciudad
##          xcdmx
```

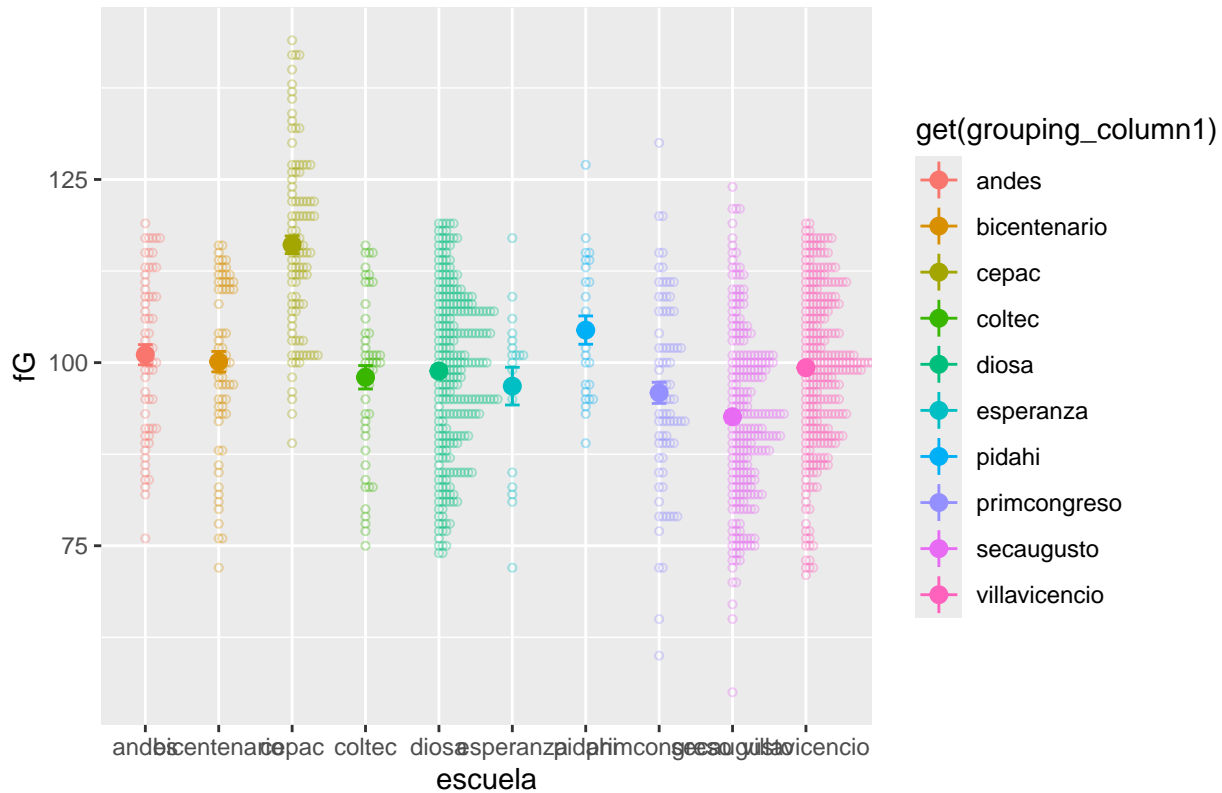
```

## 0.001419448
##
## $Tenaci$nacionalidad
##   xmexicano
## 0.006650907
##
## $Tenaci$capacidad
## [1] 0.04793674
##
##
## $Esfuer
## $Esfuer$escuela
## xprimcongreso
##   0.04431305
##
## $Esfuer$grado
##           x1d           x2b           x2c           x3a           x6a           x6c
## 0.044021673 0.002543359 0.001648638 0.027042924 0.012576949 0.030856235
##
## $Esfuer$ciudad
##           xcdmx xguadalajara
## 0.003100297 0.008215657
##
## $Esfuer$nacionalidad
##   xmexicano
## 0.003205683
##
##
## $Preocu
## $Preocu$escuela
##           xcepac
## 0.004002426
##
## $Preocu$grado
##           x2c
## 0.003962269
##
## $Preocu$ciudad
## xguadalajara
## 2.899829e-05
##
## $Preocu$nacionalidad
##   xmexicano
## 0.0002189558
##
##
## [1] "fG escuela"
## [1] "fG grado"
## [1] "fG ciudad"
## [1] "fG capacidad"
## [1] "Tenaci escuela"
## [1] "Tenaci grado"
## [1] "Tenaci ciudad"
## [1] "Tenaci nacionalidad"

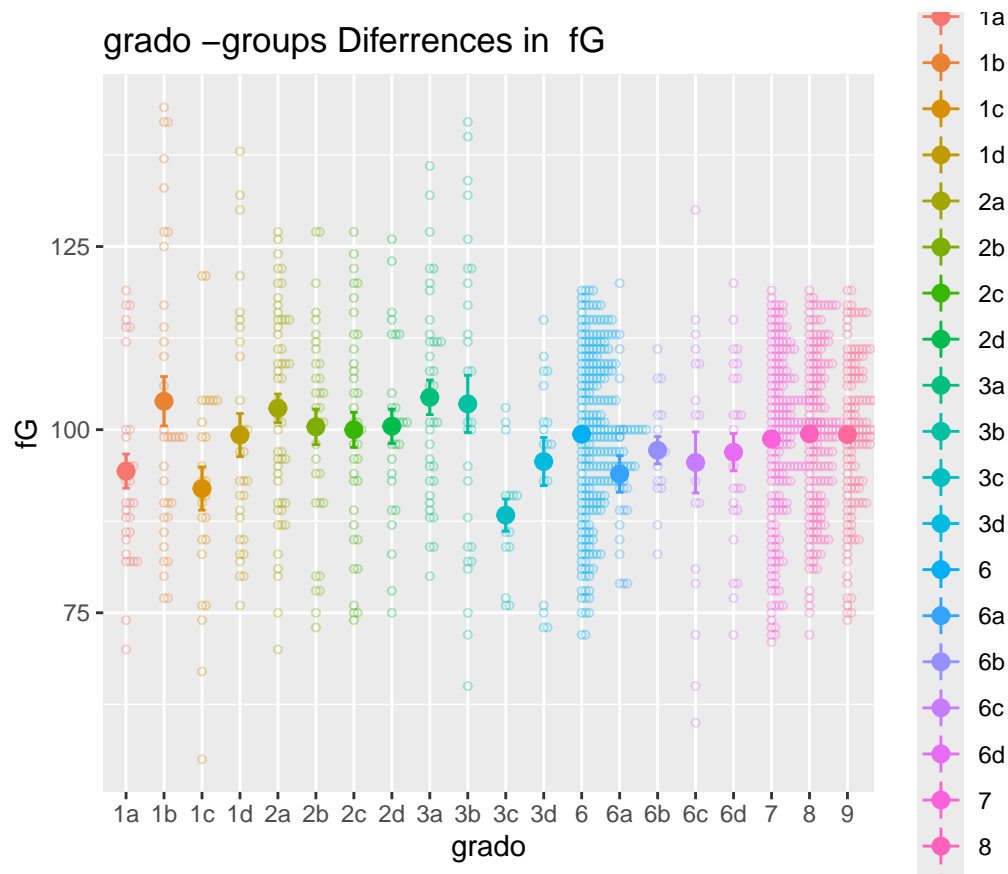
```

```
## [1] "Tenaci capacidad"
## [1] "Esfuere escuela"
## [1] "Esfuere grado"
## [1] "Esfuere ciudad"
## [1] "Esfuere nacionalidad"
## [1] "Preocu escuela"
## [1] "Preocu grado"
## [1] "Preocu ciudad"
## [1] "Preocu nacionalidad"
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```

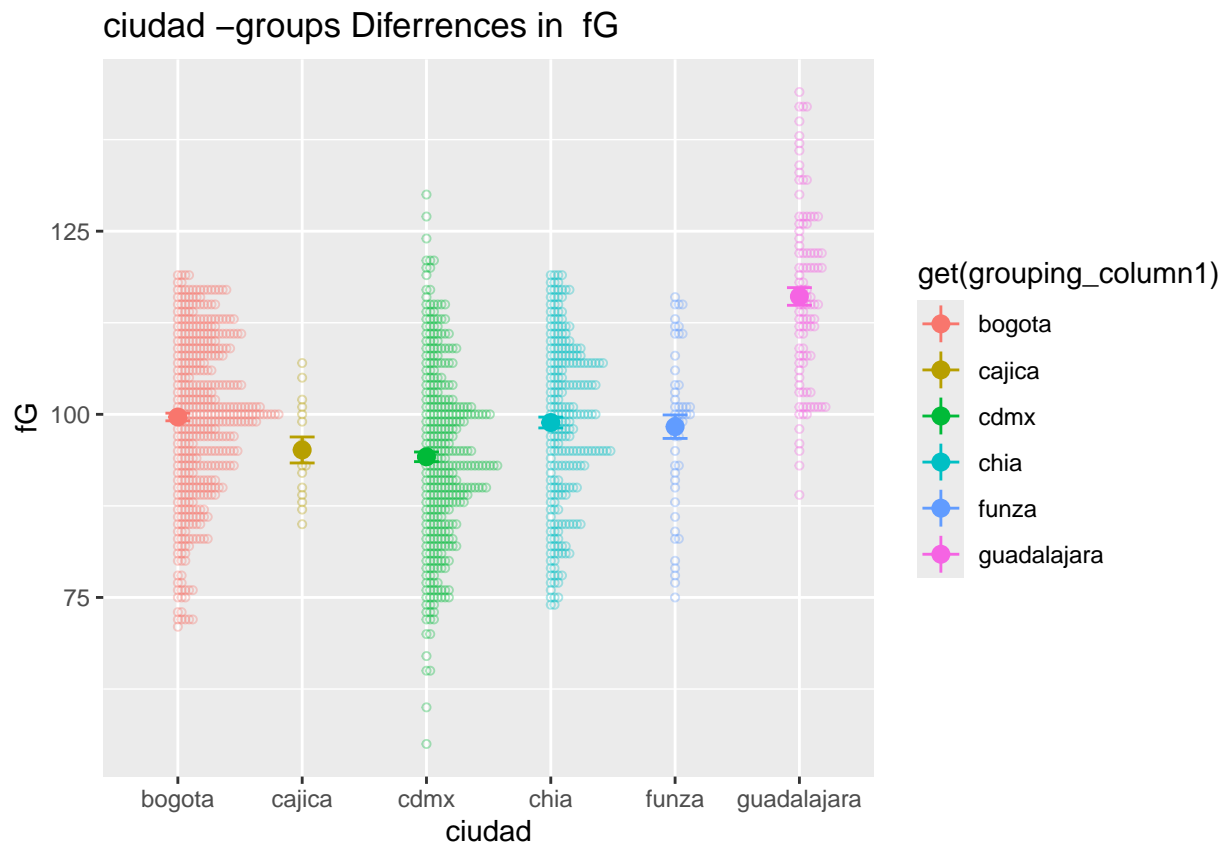
escuela –groups Differences in fG



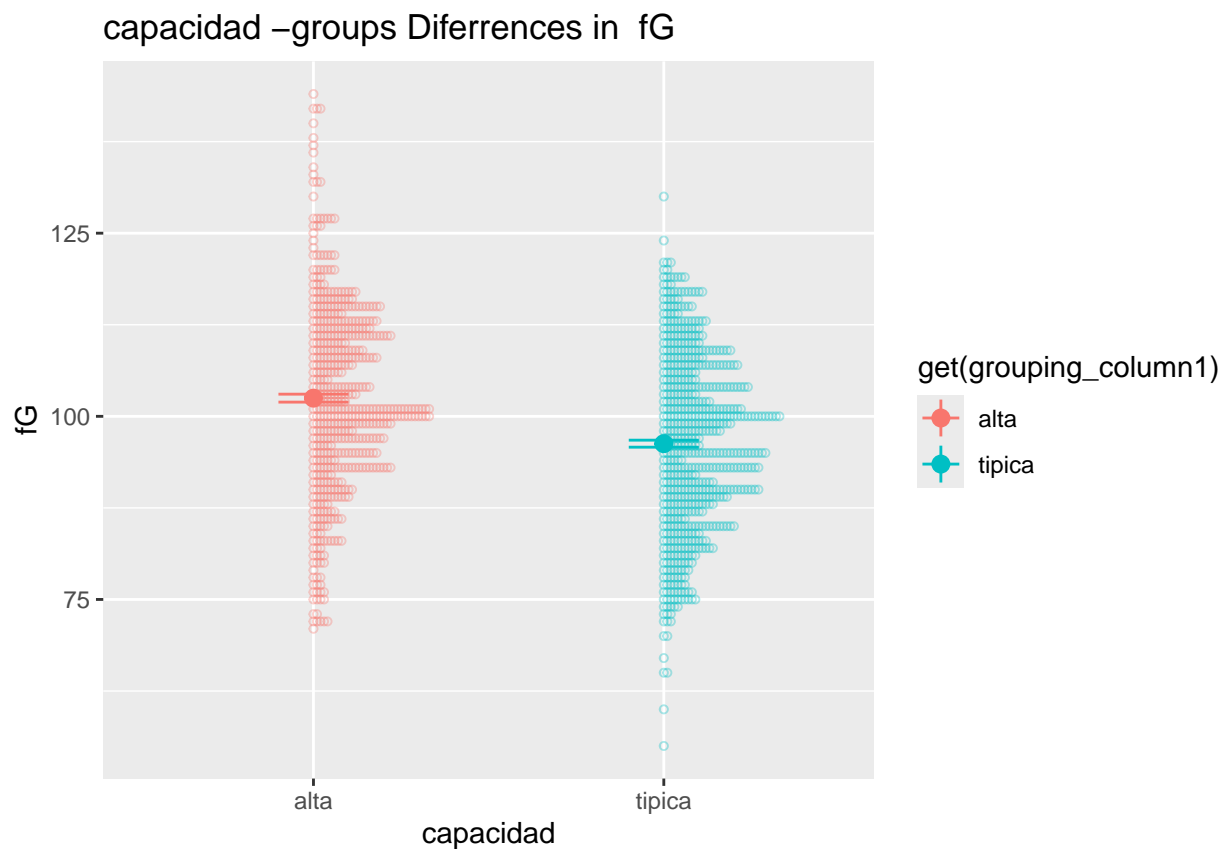
```
## [1] "=== DESCRIPTIVE STATS OF fG IN escuela GROUPS ==="
## # A tibble: 10 x 4
##   escuela      mean    sd  num
##   <fct>      <dbl> <dbl> <int>
## 1 andes      101.   10.9    63
## 2 bicentenario 100.   11.4    67
## 3 cepac      116.   12.1   101
## 4 coltec      98    11.2    49
## 5 diosa      98.9  11.3   265
## 6 esperanza   96.8  11.2    19
## 7 pidahi     104.    9.67    25
## 8 primcongreso 95.9  12.9    81
## 9 secaugusto  92.6  11.9   247
## 10 villavicencio 99.3  10.8   285
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```



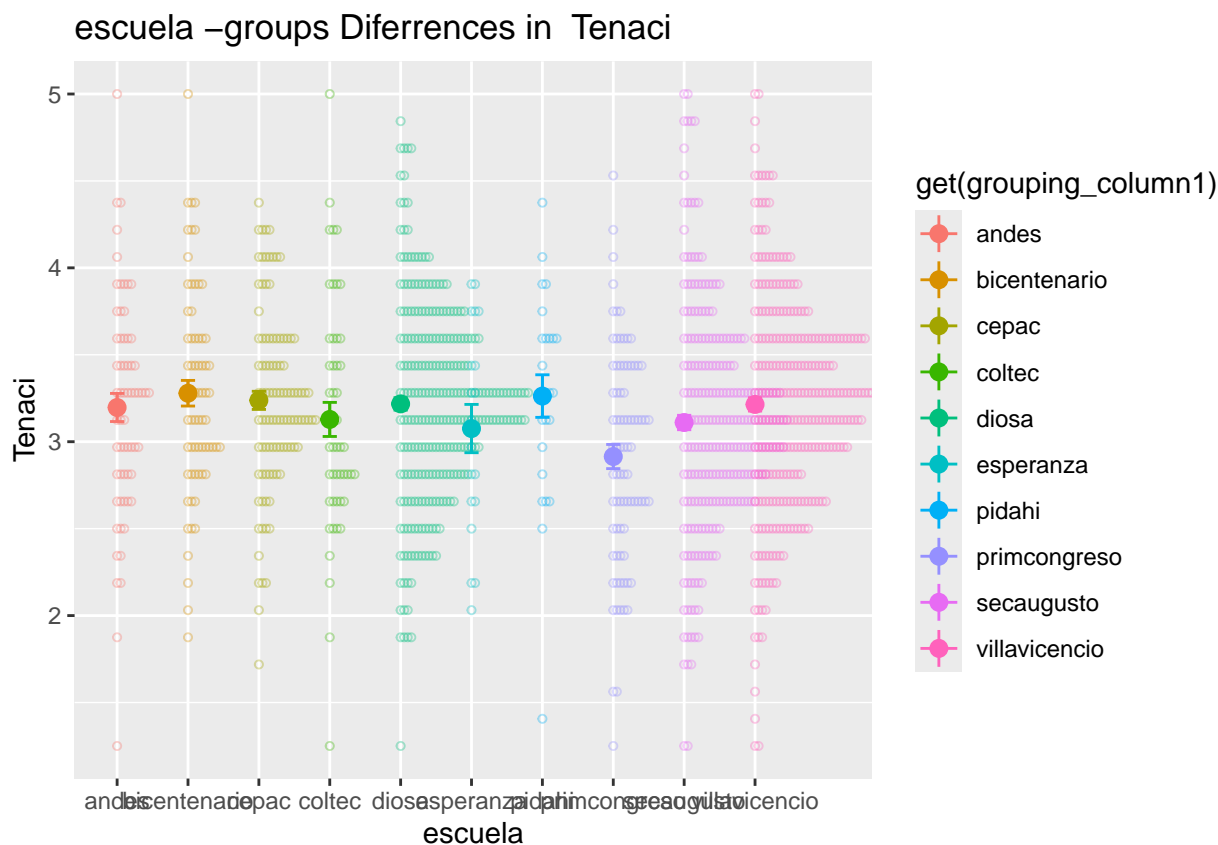
```
## [1] "=== DESCRIPTIVE STATS OF fG IN grado GROUPS ==="
## # A tibble: 20 x 4
##   grado mean    sd  num
##   <fct> <dbl> <dbl> <int>
## 1 1a     94.3 13.2    32
## 2 1b    104. 19.9    35
## 3 1c     92.0 15.0    26
## 4 1d     99.3 16.4    31
## 5 2a    103. 14.0    52
## 6 2b    100. 14.2    34
## 7 2c    100. 14.7    38
## 8 2d    100. 12.4    28
## 9 3a    104. 14.2    36
## 10 3b    104. 21.0    29
## 11 3c     88.3 8.54    15
## 12 3d     95.6 13.6    17
## 13 6     99.4 11.1   252
## 14 6a    94.0 11.4    21
## 15 6b    97.2 7.47    16
## 16 6c    95.5 18.2    19
## 17 6d    96.9 12.7    25
## 18 7     98.7 11.6   195
## 19 8     99.4 10.9   172
## 20 9     99.3 10.7   129
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```



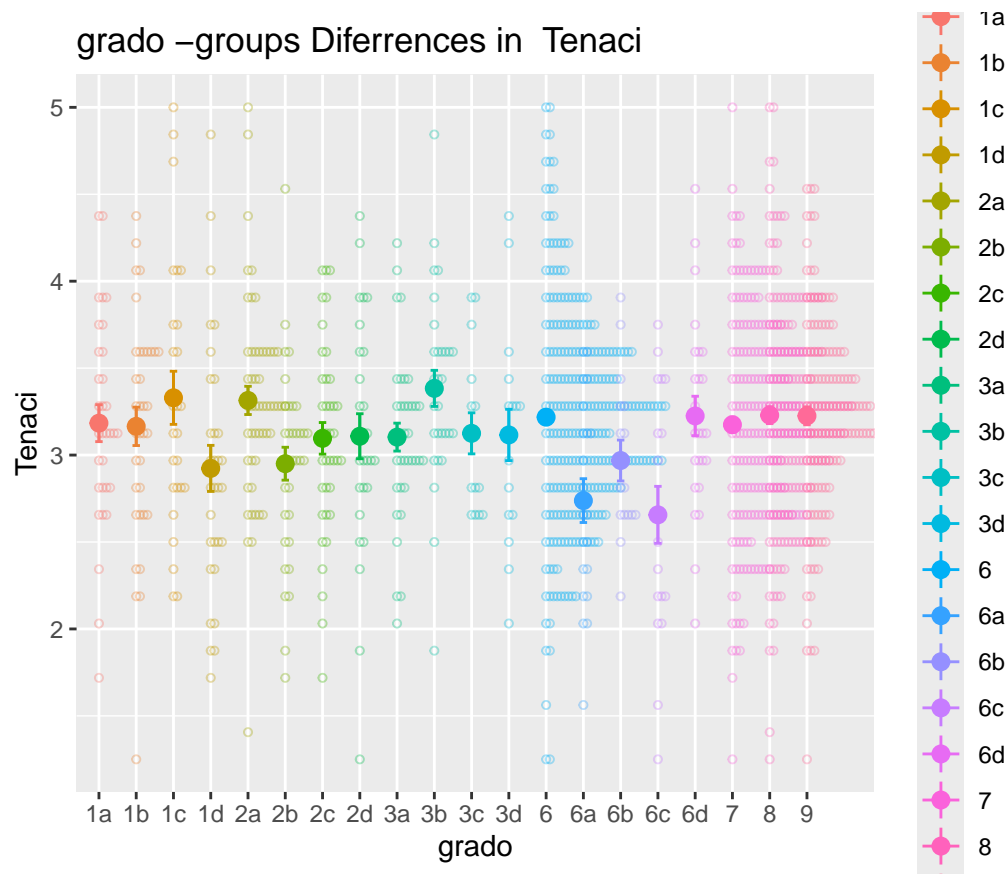
```
## [1] "=== DESCRIPTIVE STATS OF fG IN ciudad GROUPS ==="
## # A tibble: 6 x 4
##   ciudad      mean    sd  num
##   <fct>      <dbl> <dbl> <int>
## 1 bogota      99.6  11.0   443
## 2 cajica      95.1   6.88    15
## 3 cdmx        94.2  12.4   353
## 4 chia        98.9  11.5   242
## 5 funza       98.3  11.1    48
## 6 guadalajara 116.   12.1   101
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```



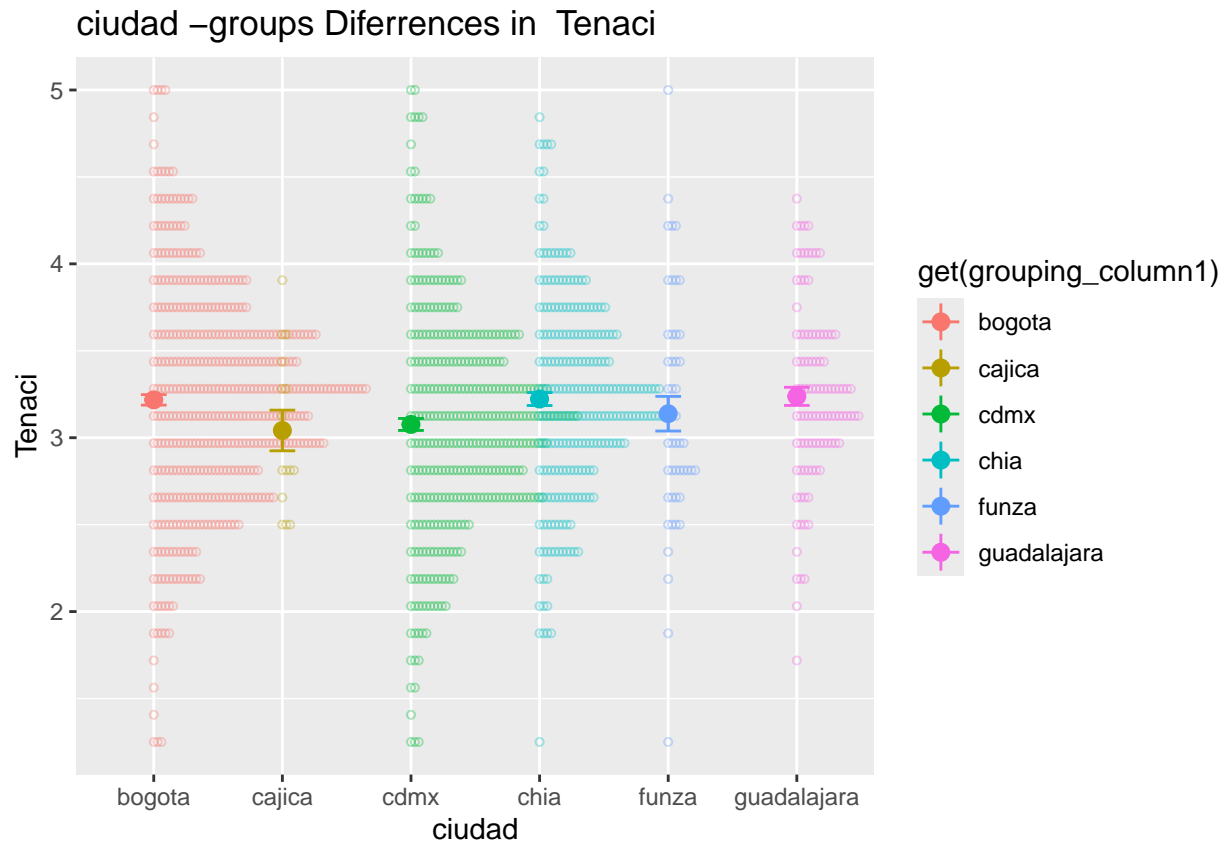
```
## [1] "=== DESCRIPTIVE STATS OF fG IN capacidad GROUPS ==="
## # A tibble: 2 x 4
##   capacidad mean    sd  num
##   <fct>      <dbl> <dbl> <int>
## 1 alta      102.   12.8  560
## 2 tipica    96.3  12.1  642
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```



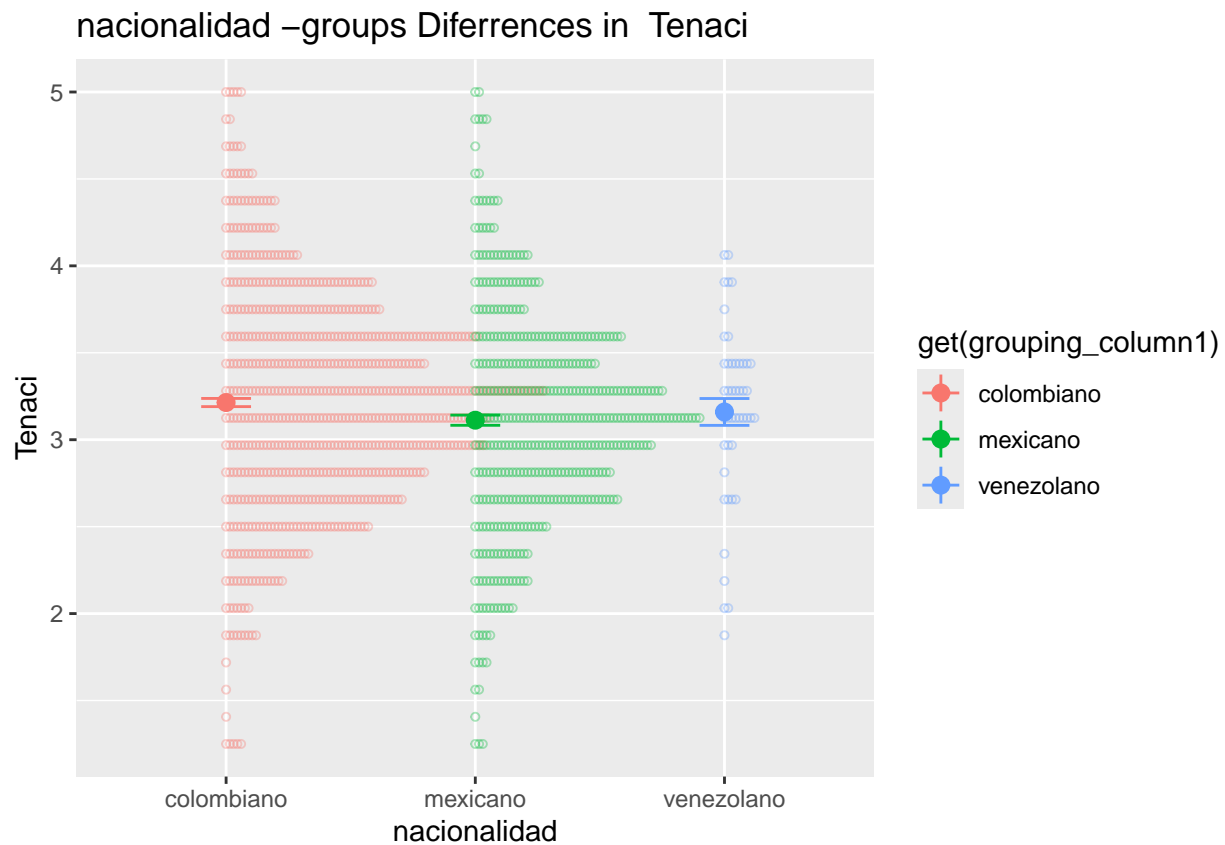
```
## [1] "=== DESCRIPTIVE STATS OF Tenaci IN escuela GROUPS ==="
## # A tibble: 10 x 4
##   escuela      mean    sd  num
##   <fct>      <dbl> <dbl> <int>
## 1 andes      3.20 0.642   63
## 2 bicentenario 3.28 0.603   67
## 3 cepac      3.24 0.524  101
## 4 coltec     3.13 0.686   49
## 5 diosa      3.22 0.580  265
## 6 esperanza  3.08 0.605   19
## 7 pidahi     3.26 0.612   25
## 8 primcongreso 2.91 0.625   81
## 9 secaugusto  3.11 0.650  247
## 10 villavicencio 3.21 0.642  285
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```



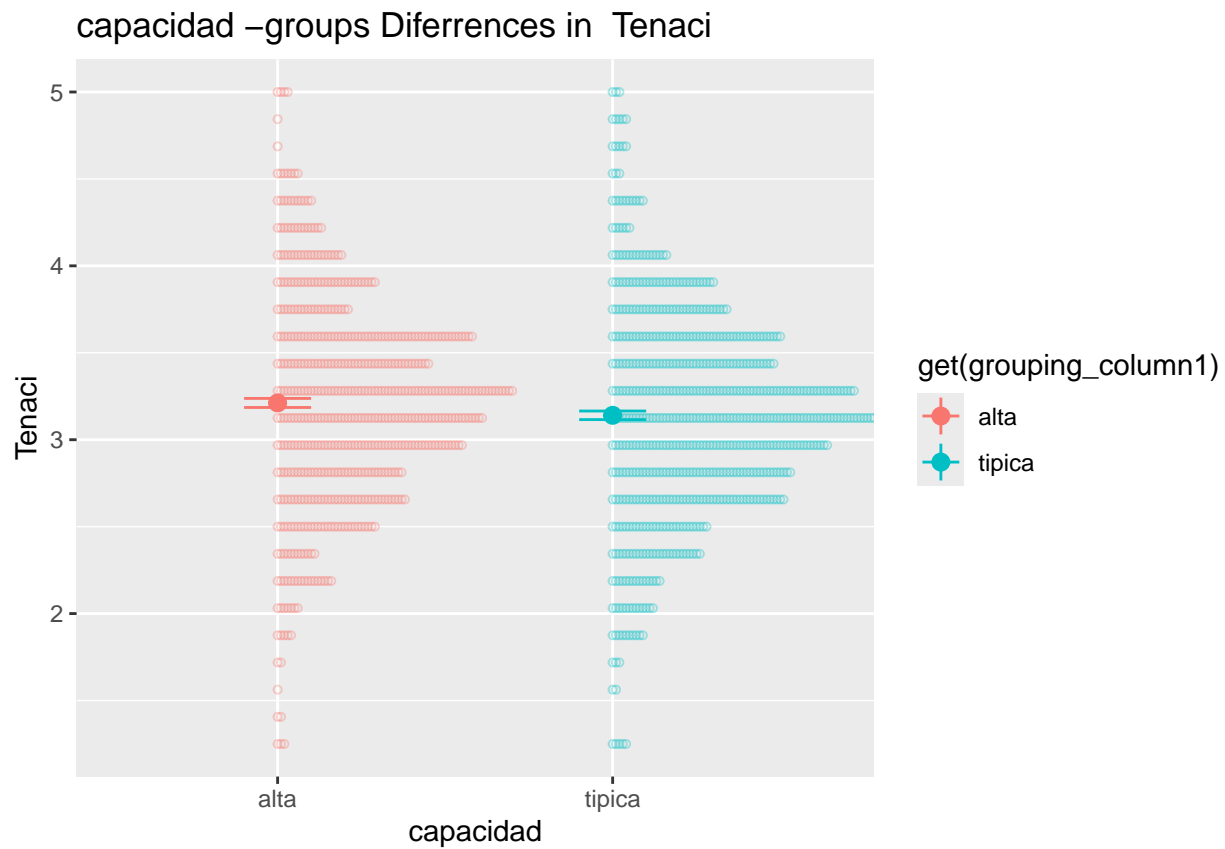
```
## [1] "=== DESCRIPTIVE STATS OF Tenaci IN grado GROUPS ==="
## # A tibble: 20 x 4
##   grado mean    sd  num
##   <fct> <dbl> <dbl> <int>
## 1 1a     3.18 0.602   32
## 2 1b     3.17 0.653   35
## 3 1c     3.33 0.779   26
## 4 1d     2.92 0.738   31
## 5 2a     3.31 0.586   52
## 6 2b     2.95 0.552   34
## 7 2c     3.10 0.560   38
## 8 2d     3.11 0.685   28
## 9 3a     3.10 0.481   36
## 10 3b     3.38 0.559   29
## 11 3c     3.12 0.457   15
## 12 3d     3.12 0.609   17
## 13 6      3.22 0.634  252
## 14 6a     2.74 0.578   21
## 15 6b     2.97 0.470   16
## 16 6c     2.66 0.714   19
## 17 6d     3.22 0.567   25
## 18 7      3.17 0.605  195
## 19 8      3.23 0.637  172
## 20 9      3.23 0.585  129
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```

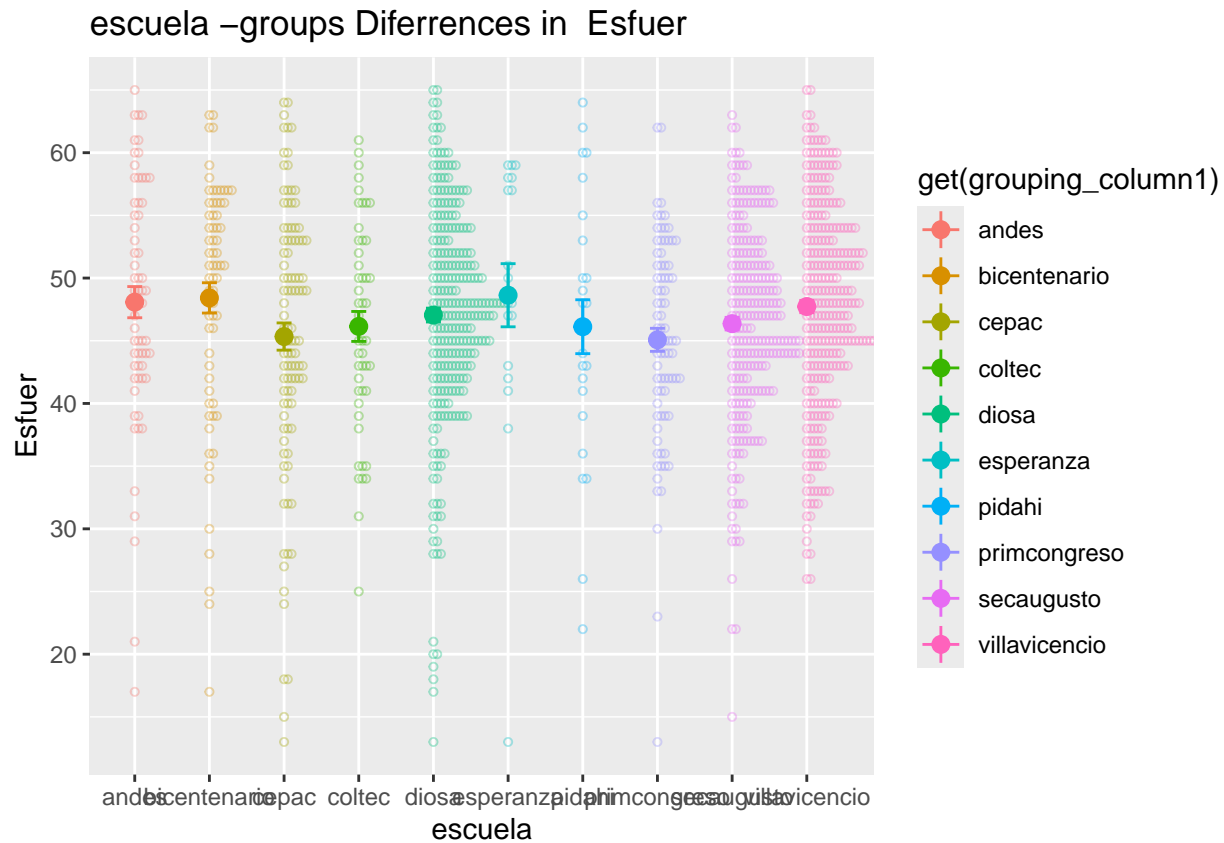
```
## [1] "=== DESCRIPTIVE STATS OF Tenaci IN ciudad GROUPS ==="
## # A tibble: 6 x 4
##   ciudad      mean    sd  num
##   <fct>      <dbl> <dbl> <int>
## 1 bogota      3.22 0.635  443
## 2 cajica      3.04 0.453   15
## 3 cdmx        3.08 0.647  353
## 4 chia        3.22 0.582  242
## 5 funza       3.14 0.690   48
## 6 guadalajara 3.24 0.524  101
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```



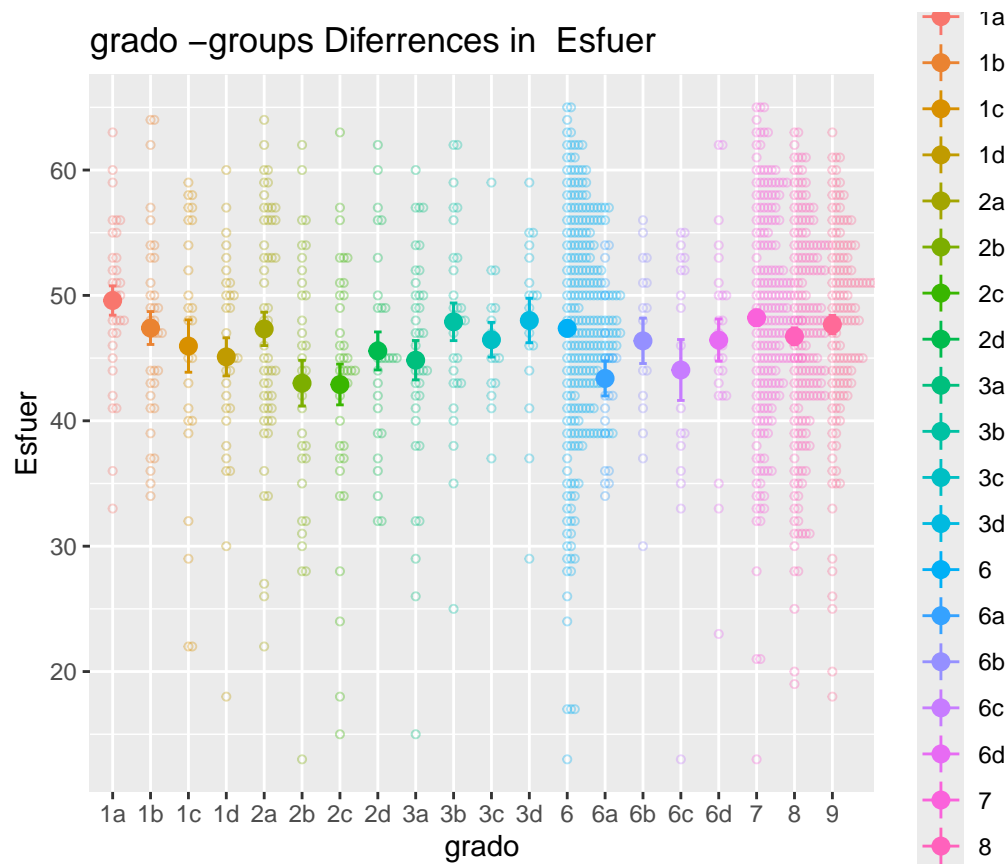
```
## [1] "=== DESCRIPTIVE STATS OF Tenaci IN nacionalidad GROUPS ==="
## # A tibble: 3 x 4
##   nacionalidad mean    sd  num
##   <fct>         <dbl> <dbl> <int>
## 1 colombiano   3.21 0.624  703
## 2 mexicano     3.11 0.625  454
## 3 venezolano   3.16 0.518   45
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```



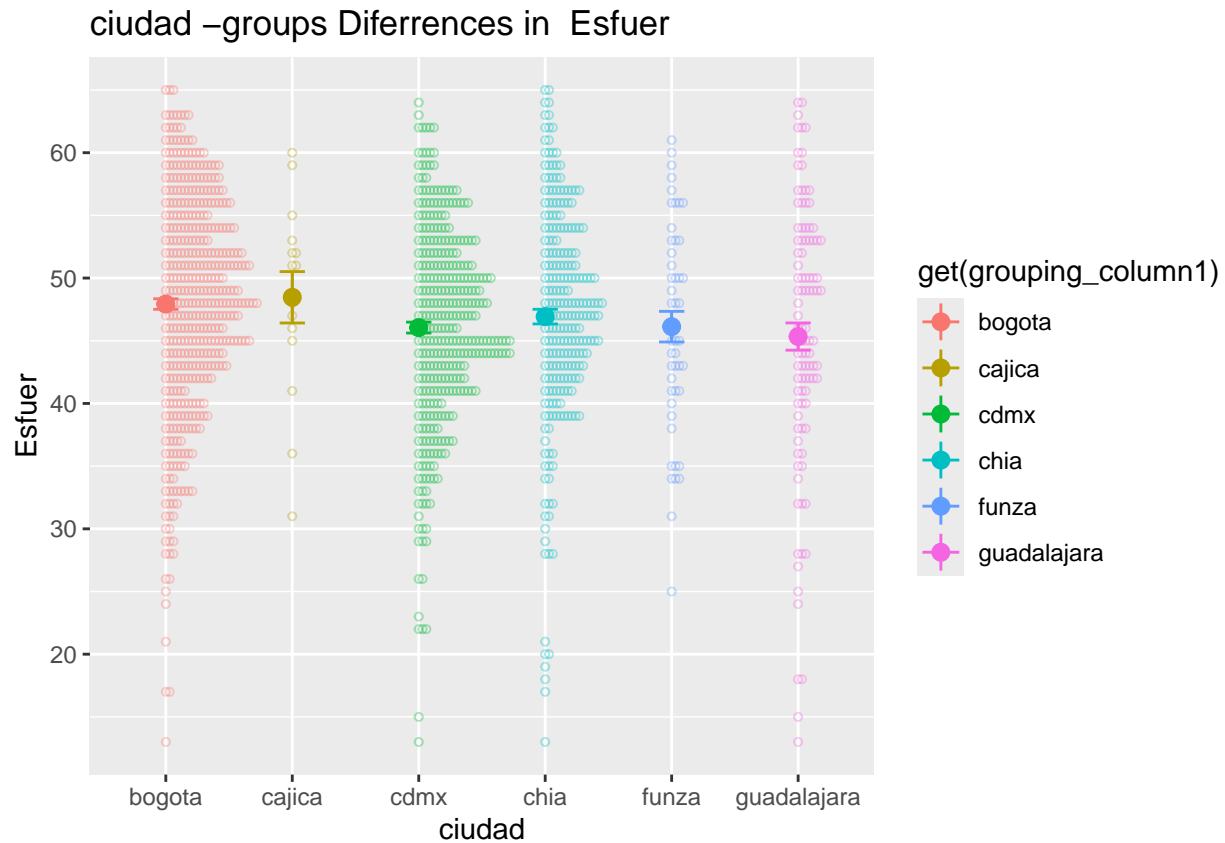
```
## [1] "=== DESCRIPTIVE STATS OF Tenaci IN capacidad GROUPS ==="
## # A tibble: 2 x 4
##   capacidad mean    sd  num
##   <fct>      <dbl> <dbl> <int>
## 1 alta        3.21 0.618  560
## 2 tipica      3.14 0.625  642
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```



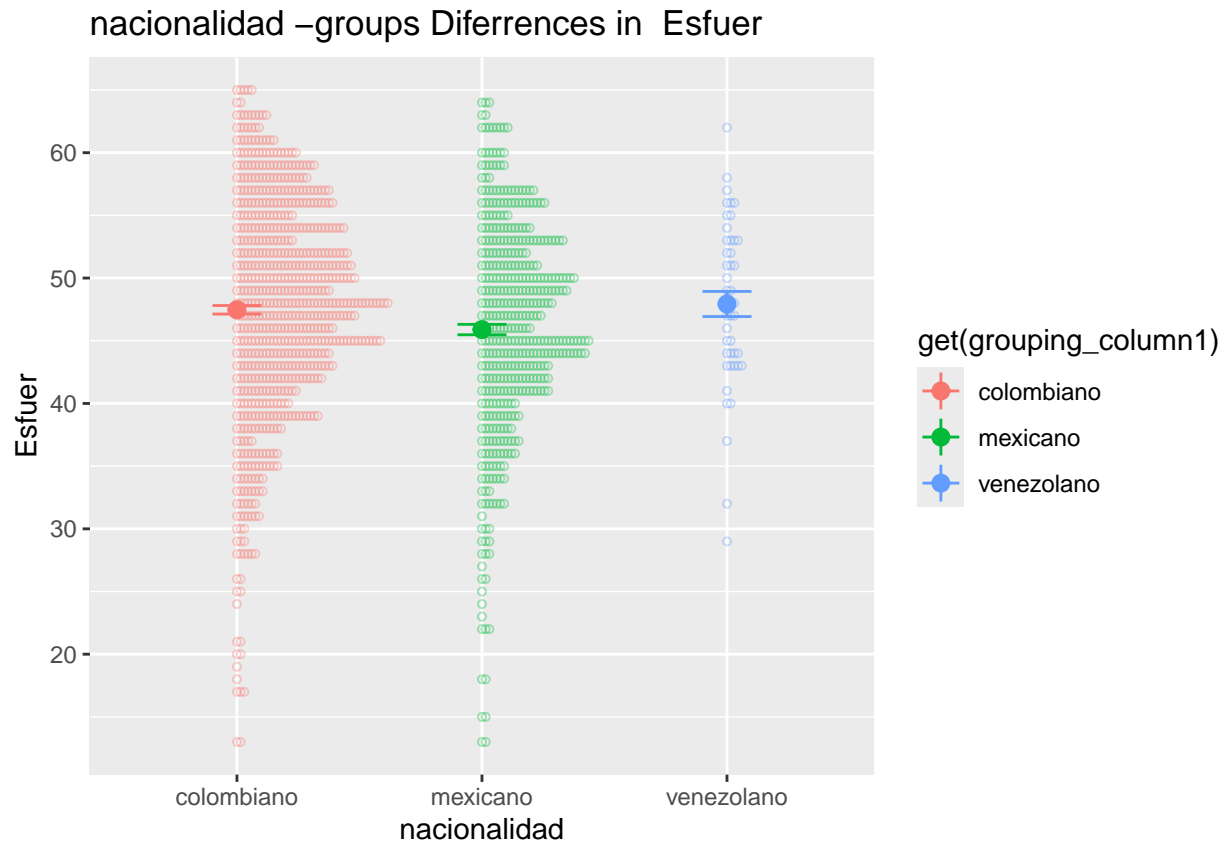
```
## [1] "=== DESCRIPTIVE STATS OF Esfuer IN escuela GROUPS ==="
## # A tibble: 10 x 4
##   escuela      mean    sd  num
##   <fct>      <dbl> <dbl> <int>
## 1 andes      48.1  9.87   63
## 2 bicentenario 48.4  9.90   67
## 3 cepac      45.3 10.9  101
## 4 coltec     46.1  8.37   49
## 5 diosa      47.0  8.99  265
## 6 esperanza  48.6 11.0   19
## 7 pidahi     46.1 10.7   25
## 8 primcongreso 45.1  8.27   81
## 9 secaugusto  46.4  7.86  247
## 10 villavicencio 47.7  8.27  285
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```



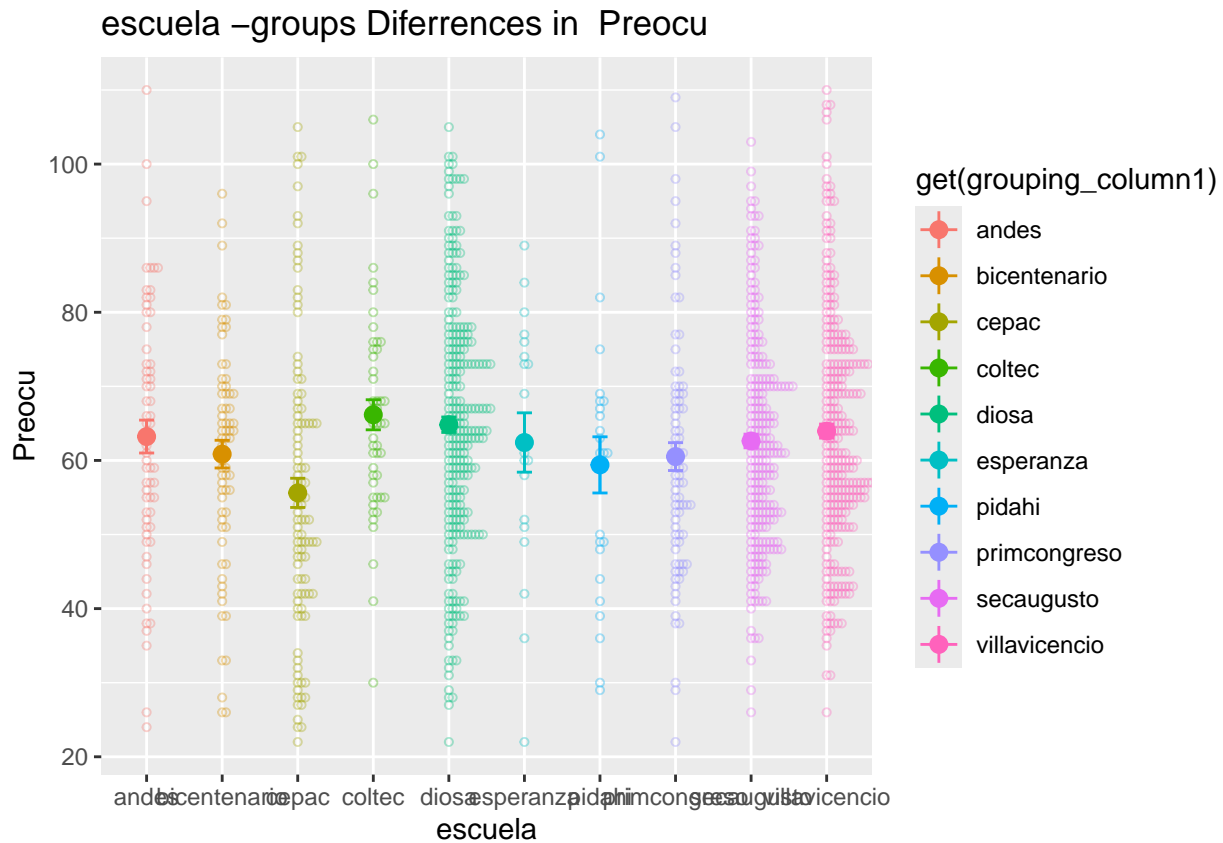
```
## [1] "=== DESCRIPTIVE STATS OF Esfuer IN grado GROUPS ==="
## # A tibble: 20 x 4
##   grado mean    sd  num
##   <fct> <dbl> <dbl> <int>
## 1 1a     49.6  6.61   32
## 2 1b     47.4  7.77   35
## 3 1c     46.0 10.6    26
## 4 1d     45.1  8.46   31
## 5 2a     47.3  9.58   52
## 6 2b     43    10.7   34
## 7 2c     42.9 10.0   38
## 8 2d     45.6  8.02   28
## 9 3a     44.8  9.42   36
## 10 3b     47.9  8.09   29
## 11 3c     46.5  5.37   15
## 12 3d     48    7.32   17
## 13 6      47.4  9.27  252
## 14 6a     43.4  6.41   21
## 15 6b     46.4  7.23   16
## 16 6c     44.1 10.6    19
## 17 6d     46.4  8.39   25
## 18 7      48.2  8.75  195
## 19 8      46.7  8.87  172
## 20 9      47.7  8.37  129
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```



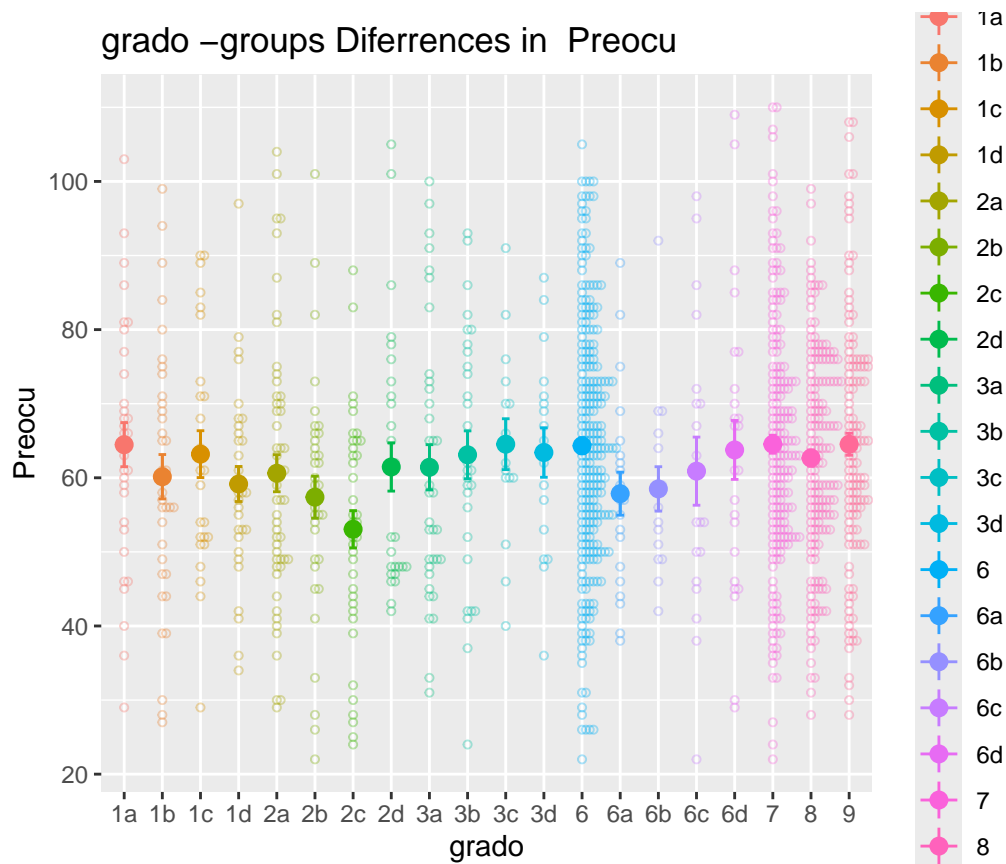
```
## [1] "=== DESCRIPTIVE STATS OF Esfuer IN ciudad GROUPS ==="
## # A tibble: 6 x 4
##   ciudad      mean    sd  num
##   <fct>      <dbl> <dbl> <int>
## 1 bogota      47.9  8.86  443
## 2 cajica      48.5  7.94   15
## 3 cdmx        46.1  8.18  353
## 4 chia        46.9  9.08  242
## 5 funza       46.1  8.45   48
## 6 guadalajara 45.3 10.9  101
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```



```
## [1] "=== DESCRIPTIVE STATS OF Esfuer IN nacionalidad GROUPS ==="
## # A tibble: 3 x 4
##   nacionalidad mean    sd  num
##   <fct>         <dbl> <dbl> <int>
## 1 colombiano   47.5  9.01  703
## 2 mexicano     45.9  8.85  454
## 3 venezolano   47.9  6.74   45
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```



```
## [1] "=== DESCRIPTIVE STATS OF Preocu IN escuela GROUPS ==="
## # A tibble: 10 x 4
##   escuela      mean    sd  num
##   <fct>      <dbl> <dbl> <int>
## 1 andes        63.2  17.6   63
## 2 bicentenario  60.9  15.3   67
## 3 cepac        55.6  19.8  101
## 4 coltec       66.2  14.2   49
## 5 diosa        64.8  17.0  265
## 6 esperanza    62.4  17.4   19
## 7 pidahi       59.4  19.0   25
## 8 primcongreso  60.5  16.9   81
## 9 secaugusto   62.6  14.5  247
## 10 villavicencio 64.0  16.0  285
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```

```
## [1] "=== DESCRIPTIVE STATS OF Preocu IN grado GROUPS ==="
```

```
## # A tibble: 20 x 4
```

```
##   grado mean   sd  num
```

```
##   <fct> <dbl> <dbl> <int>
```

```
## 1 1a     64.5  16.8   32
```

```
## 2 1b     60.1  17.7   35
```

```
## 3 1c     63.2  16.1   26
```

```
## 4 1d     59.2  13.2   31
```

```
## 5 2a     60.6  18.0   52
```

```
## 6 2b     57.4  16.5   34
```

```
## 7 2c     53.1  15.5   38
```

```
## 8 2d     61.5  17.2   28
```

```
## 9 3a     61.4  18.3   36
```

```
## 10 3b    63.1  17.4   29
```

```
## 11 3c    64.5  13.3   15
```

```
## 12 3d    63.4  13.8   17
```

```
## 13 6     64.3  17.0  252
```

```
## 14 6a    57.9  13.3   21
```

```
## 15 6b    58.5  12.0   16
```

```
## 16 6c    60.9  20.0   19
```

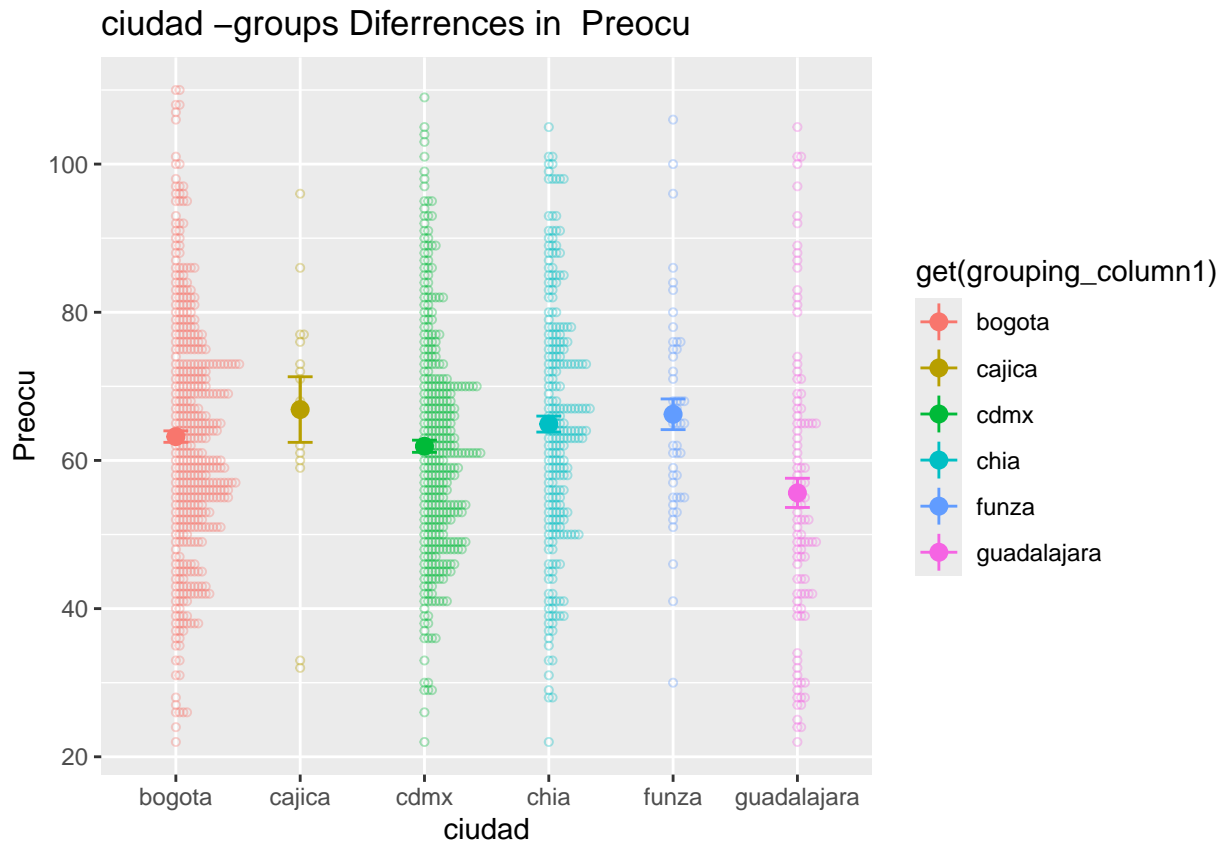
```
## 17 6d    63.8  19.9   25
```

```
## 18 7     64.5  16.9  195
```

```
## 19 8     62.7  14.3  172
```

```
## 20 9     64.5  16.9  129
```

```
## [1] "=== GROUP DIFFERENCES GRAPH ==="
```

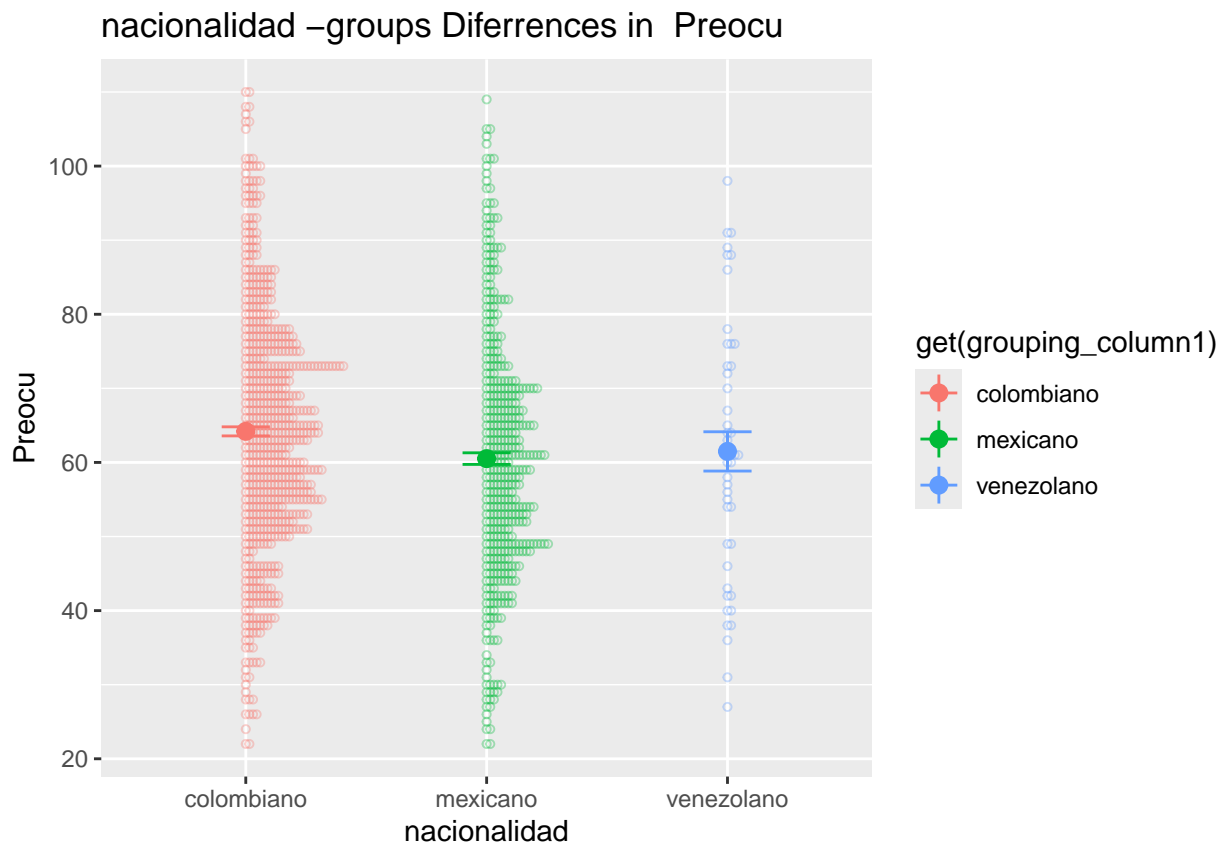


```
## [1] "=== DESCRIPTIVE STATS OF Preocu IN ciudad GROUPS ==="
## # A tibble: 6 x 4
##   ciudad      mean    sd  num
##   <fct>      <dbl> <dbl> <int>
## 1 bogota      63.2  16.3  443
## 2 cajica      66.9  17.1   15
## 3 cdmx        61.9  15.4  353
## 4 chia        64.9  16.8  242
## 5 funza       66.2  14.4   48
## 6 guadalajara 55.6  19.8  101
## [1] "=== GROUP DIFFERENCES GRAPH ==="

## [1] "=== DESCRIPTIVE STATS OF Preocu IN nacionalidad GROUPS ==="
## # A tibble: 3 x 4
##   nacionalidad mean    sd  num
##   <fct>      <dbl> <dbl> <int>
## 1 colombiano  64.2  16.3  703
## 2 mexicano    60.5  16.7  454
## 3 venezolano  61.5  17.8   45

##
## Attaching package: 'gridExtra'

## The following object is masked from 'package:dplyr':
##
##   combine
```



```
# SHOW RESULTS
categorical_results
```

```
## $fG
## $fG$escuela
##      xcepac xprimcongreso  xsecaugusto
## 8.453539e-16 6.966841e-03 1.962082e-07
##
## $fG$grado
##      x1b      x2a      x3a      x3b      x6      x8
## 0.002125176 0.002636762 0.001098538 0.004825131 0.034494787 0.037487880
##      x9
## 0.046386617
##
## $fG$ciudad
##      xcdmx xguadalajara
## 6.772918e-11 9.875281e-36
##
## $fG$capacidad
## [1] 2.005137e-17
##
##
## $Tenaci
## $Tenaci$escuela
## xprimcongreso
## 0.006709368
##
```

```

## $Tenaci$grado
##      x6a      x6c
## 0.009994055 0.003121953
##
## $Tenaci$ciudad
##      xcdmx
## 0.001419448
##
## $Tenaci$nacionalidad
##      xmexicano
## 0.006650907
##
## $Tenaci$capacidad
## [1] 0.04793674
##
##
## $Esfuer
## $Esfuer$escuela
## xprimcongreso
##      0.04431305
##
## $Esfuer$grado
##      x1d      x2b      x2c      x3a      x6a      x6c
## 0.044021673 0.002543359 0.001648638 0.027042924 0.012576949 0.030856235
##
## $Esfuer$ciudad
##      xcdmx xguadalajara
## 0.003100297 0.008215657
##
## $Esfuer$nacionalidad
##      xmexicano
## 0.003205683
##
##
## $Preocu
## $Preocu$escuela
##      xcepac
## 0.004002426
##
## $Preocu$grado
##      x2c
## 0.003962269
##
## $Preocu$ciudad
##      xguadalajara
## 2.899829e-05
##
## $Preocu$nacionalidad
##      xmexicano
## 0.0002189558

```

CORRELATION ANALYSES

Analysis of association among the following variables:

- G
- GRIT
- Esfuerzo
- Preocupacion

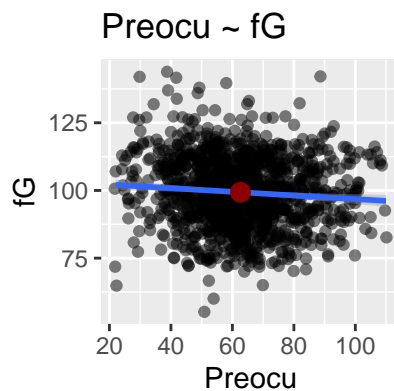
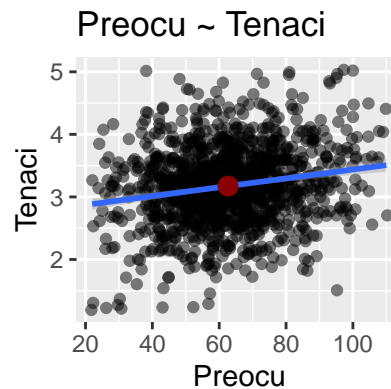
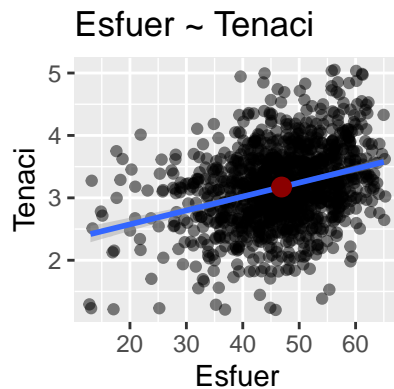
Correlation Analysis.

```
scatterplot_significant_correlations(cormatrixrows, cormatrixrcols, sign=0.05)
```

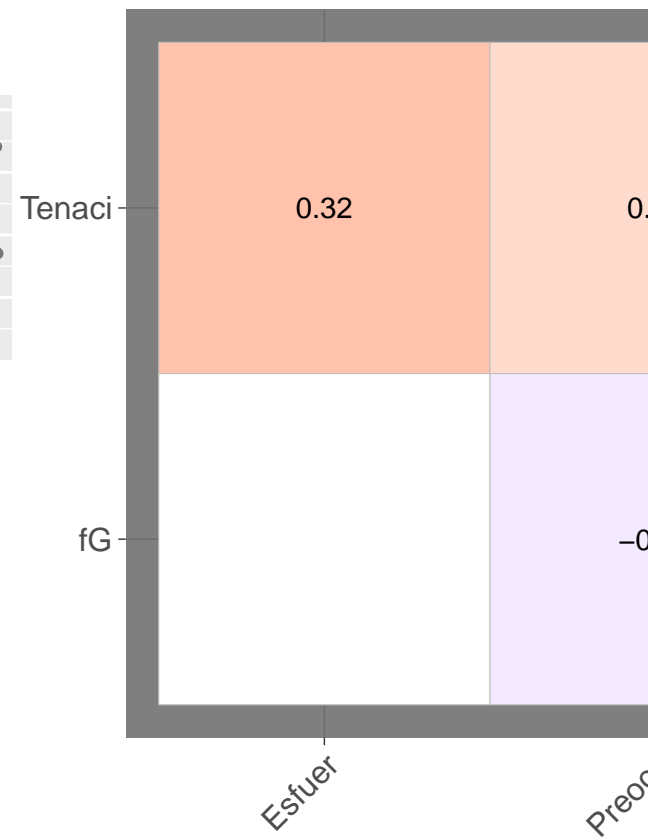
```
## [1] "Tenaci Esfuer _ r = 0.31817045 _ pval = 0"
## [1] "fG Preocu _ r = -0.0859733 _ pval = 0.003"
## [1] "Tenaci Preocu _ r = 0.18849035 _ pval = 0"

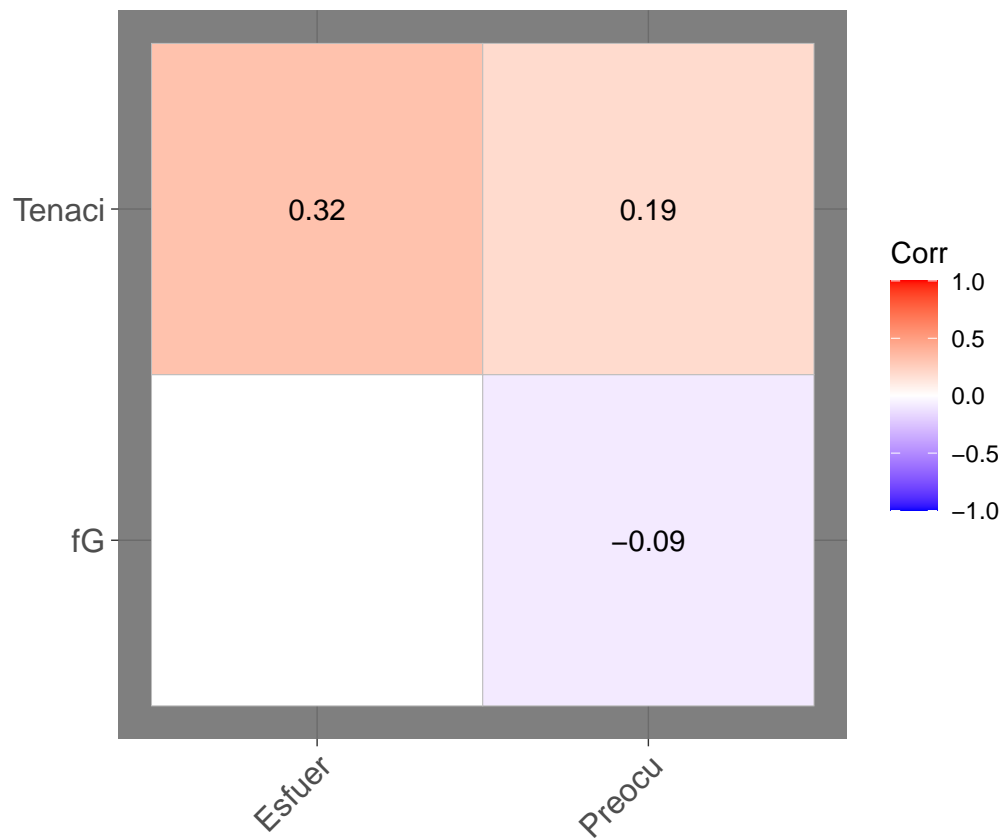
## 'geom_smooth()' using formula = 'y ~ x'
## 'geom_smooth()' using formula = 'y ~ x'
## 'geom_smooth()' using formula = 'y ~ x'
```

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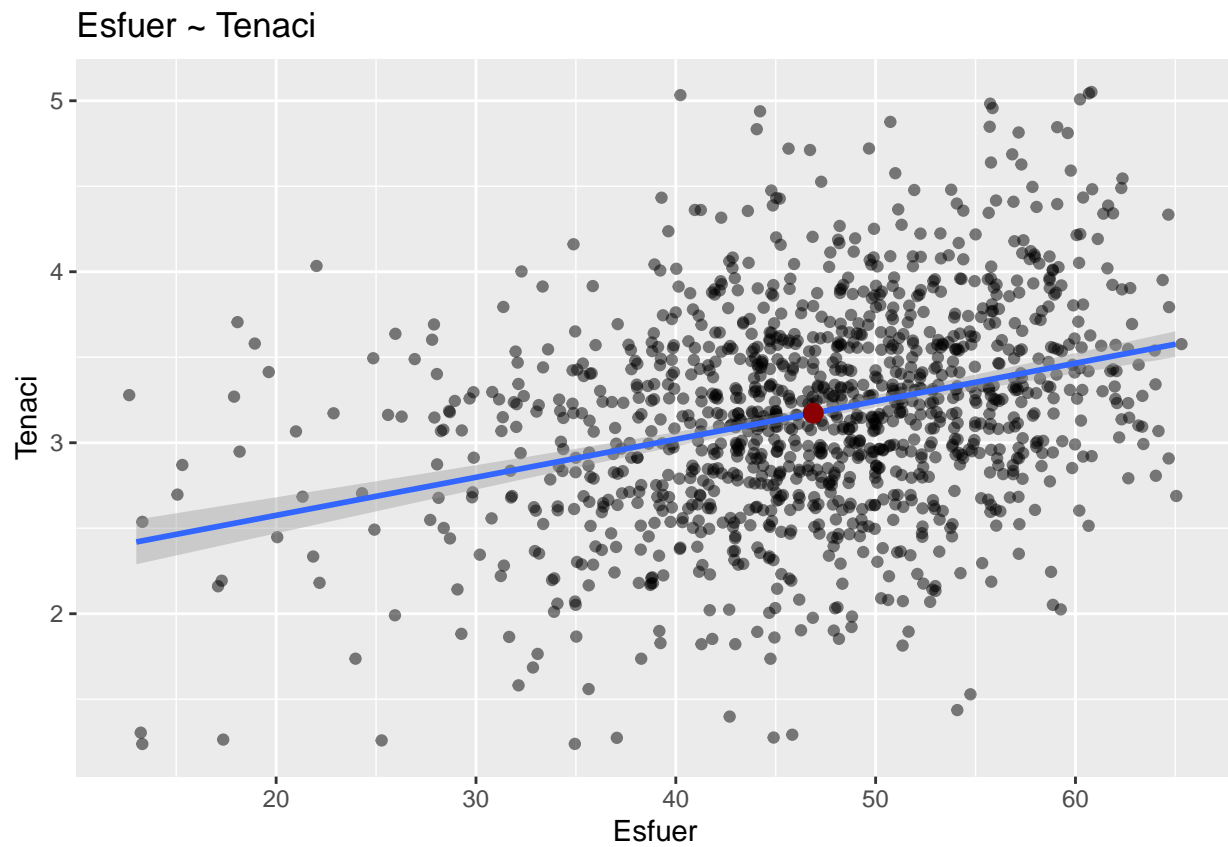


```
## [[1]]
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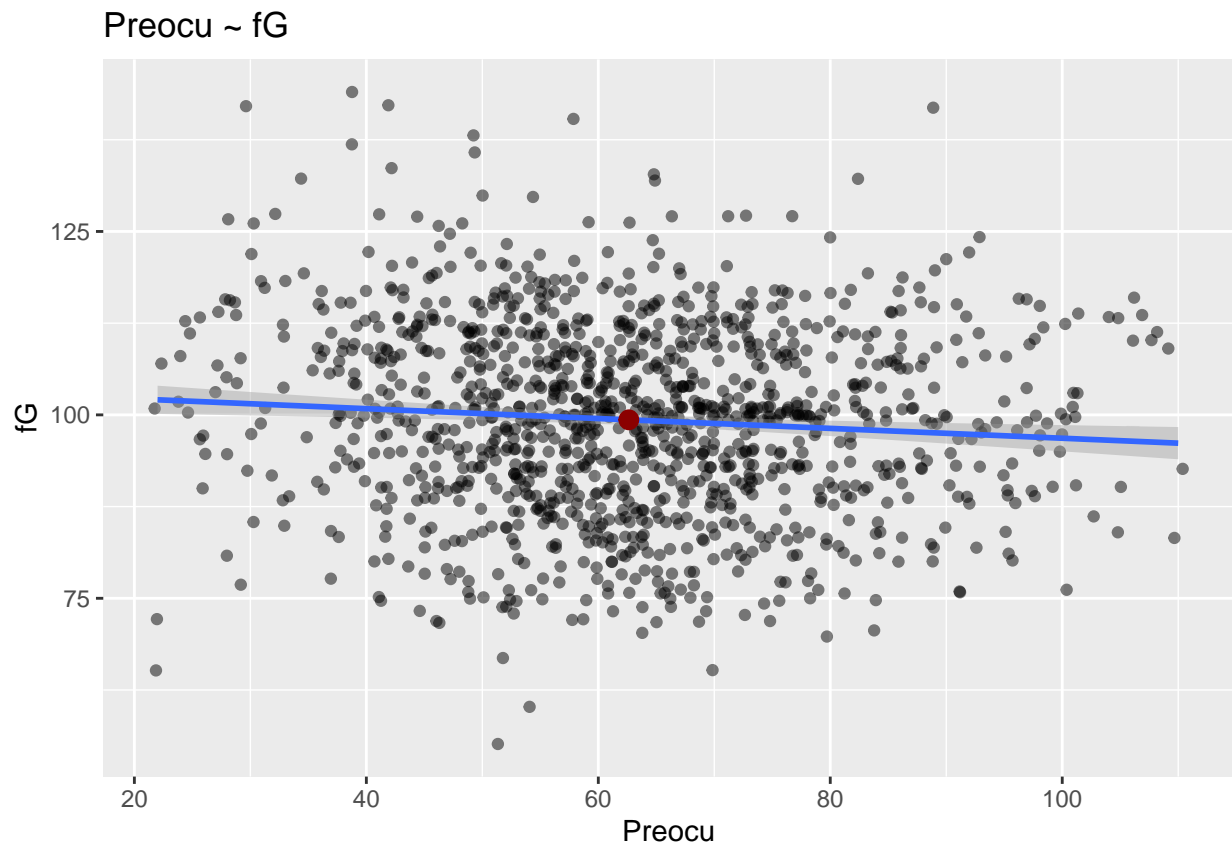




```
##
## [[2]]
## [[2]][[1]]
## 'geom_smooth()' using formula = 'y ~ x'
```



```
##  
## [[2]][[2]]  
## 'geom_smooth()' using formula = 'y ~ x'
```



```
##  
## [[2]][[3]]  
## 'geom_smooth()' using formula = 'y ~ x'
```