corrupcion y covid-19

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Parece que esta pandemia está siendo gestionada de forma muy distinta por cada país y los resultados de esta gestión estan siendo también muy distintos.  
¿de qué depende el que la respuesta sea mejor en un lado que en otro? Entiendo que de muchos factores, pero…¿cuáles de ellos son más determinantes?  
Por ejemplo ¿hay alguna relación entre calidad democrática o nivel de corrupción y cómo se ha gestionado la crisis?  
Estaría bien saber por ejemplo ¿por qué Portugal ha gestionado mejor la crisis -o así lo parece almenos- que España?

En base a estas hipótesis intentemos contrastar con indicadores y datos y a ver si encontramos algo interesante.

Por un lado, tomaré los datos relacionados con indicadores de la calidad democrática de los países a partir del índice de democracia (en inglés, [Democracy Index](https://es.wikipedia.org/wiki/%C3%8Dndice_de_democracia)), la clasificación hecha por la Unidad de Inteligencia del diario The Economist.

Por otra lado, tomaré datos relativos al nivel de afectación a causa del virus (datos de casos y de muertes por número de habitantes en un país).

No sé si éstos son los indicadores más definitorios, pero entiendo que son suficientemente sencillos de obtener, contrastar y analizar. Veamos si hay alguna relación entre ellos.

Primero obtengo los datos del Indice de democracia, de la página de wikipedia: “<https://es.wikipedia.org/wiki/%C3%8Dndice_de_democracia>”

#cargo los paquetes para hacer webscrapping y manipular datos  
library(tidyverse)  
library(rvest)  
  
#leo la página de Wikipedia  
paginawiki<- "https://en.wikipedia.org/wiki/Democracy\_Index"  
  
#extraigo las tablas  
pagina\_democracia <-   
 paginawiki %>%   
 read\_html() %>%   
 html\_nodes(xpath='//\*[@id="mw-content-text"]/div/table') %>%   
 html\_table()  
  
#tomo la segunda tabla  
tabla\_indice\_democracia <- pagina\_democracia[[2]] %>%   
 as\_tibble()  
  
#transformar en 0 los datos NA  
tabla\_indice\_democracia[is.na(tabla\_indice\_democracia)] <- 0  
  
#cambio el nombre de las columnas  
colnames(tabla\_indice\_democracia) <- c("Ranking", "Country","Score",  
 "Procesos electorales y pluralismo", "Gobierno funcional", "Participacion", "Cultura política", "Libertades civiles", "Regimen", "Region", "Cambios año previo")  
  
#paso a numerico las columnas que me interesan  
tabla\_indice\_democracia$Score <- as.numeric(tabla\_indice\_democracia$Score)  
  
tabla\_indice\_democracia$`Procesos electorales y pluralismo` <- as.numeric(as.character(tabla\_indice\_democracia$`Procesos electorales y pluralismo`))  
  
tabla\_indice\_democracia$`Gobierno funcional` <- as.numeric(as.character(tabla\_indice\_democracia$`Gobierno funcional`))  
  
tabla\_indice\_democracia$`Participacion` <- as.numeric(as.character(tabla\_indice\_democracia$`Participacion`))  
  
tabla\_indice\_democracia$`Libertades civiles` <- as.numeric(as.character(tabla\_indice\_democracia$`Libertades civiles`))  
  
tabla\_indice\_democracia$`Cultura política` <- as.numeric(as.character(tabla\_indice\_democracia$`Cultura política`))  
  
head(tabla\_indice\_democracia)

FALSE # A tibble: 6 x 11  
FALSE Ranking Country Score `Procesos elect~ `Gobierno funci~ Participacion  
FALSE <chr> <chr> <dbl> <dbl> <dbl> <dbl>  
FALSE 1 1 Norway 9.87 10 9.64 10   
FALSE 2 2 Iceland 9.58 10 9.29 8.89  
FALSE 3 3 Sweden 9.39 9.58 9.64 8.33  
FALSE 4 4 New Ze~ 9.26 10 9.29 8.89  
FALSE 5 5 Finland 9.25 10 8.93 8.89  
FALSE 6 6 Ireland 9.24 10 7.86 8.33  
FALSE # ... with 5 more variables: `Cultura política` <dbl>, `Libertades  
FALSE # civiles` <dbl>, Regimen <chr>, Region <chr>, `Cambios año previo` <chr>

Luego, tomo los datos actualizados de la afectación por causa del covid-19 -tal y como he hecho en anteriores posts- de la *European Centre for Disease Prevention and Control* (<https://www.ecdc.europa.eu/en/geographical-distribution-2019-ncov-cases>)

#proceso de igual forma que anteriormente  
paginaecdc <- read\_html("https://www.ecdc.europa.eu/en/geographical-distribution-2019-ncov-cases")  
  
lista\_de\_tablas <- paginaecdc %>%  
 html\_nodes("table") %>%  
 .[1] %>%  
 html\_table(fill = TRUE)  
  
#tomo la que me interesa  
tabla\_coronavirus <-lista\_de\_tablas[[1]]  
  
#cambio el nombre de las columnas  
colnames(tabla\_coronavirus) <- c("Continent", "Country","Casos",   
 "Muertes", "casos confirmados últimos 14 días")  
  
head (tabla\_coronavirus)

FALSE Continent Country Casos Muertes casos confirmados últimos 14 días  
FALSE 1 Africa Algeria 6629 536 2475  
FALSE 2 Africa Angola 48 2 19  
FALSE 3 Africa Benin 339 2 249  
FALSE 4 Africa Botswana 24 1 1  
FALSE 5 Africa Burkina\_Faso 782 51 133  
FALSE 6 Africa Burundi 27 1 12

Si quiero dividir los casos por densidad de población, me faltan los datos de la población de los países… Los puedo obtener también de wikipedia aquí: <https://en.wikipedia.org/wiki/List_of_countries_and_dependencies_by_population>

Lo hago:

#leo la página de Wikipedia  
poblacionwiki<- "https://en.wikipedia.org/wiki/List\_of\_countries\_and\_dependencies\_by\_population"  
  
#extraigo las tablas  
tablas\_poblacion <-   
 poblacionwiki %>%   
 read\_html() %>%   
 html\_nodes(xpath='//\*[@id="mw-content-text"]/div/table') %>%   
 html\_table()  
  
#tomo la primera tabla  
tabla\_poblacion <- tablas\_poblacion[[1]] %>%   
 as\_tibble()  
#cambio a numberico el valor de la columna poblacion  
tabla\_poblacion$Population <- as.numeric(gsub(",","",tabla\_poblacion$Population))  
  
colnames(tabla\_poblacion) <- c("Ranking", "Country","poblacion",   
 "% de la población mundial", "fecha", "fuente")  
  
#elimino refs [a],etc. del nombre del país  
tabla\_poblacion$Country <- tabla\_poblacion$Country %>% str\_remove("\\[[:alpha:]\\]")  
  
head(tabla\_poblacion)

FALSE # A tibble: 6 x 6  
FALSE Ranking Country poblacion `% de la población mu~ fecha fuente   
FALSE <chr> <chr> <dbl> <chr> <chr> <chr>   
FALSE 1 1 China 1402669040 18.0% 16 May~ National populat~  
FALSE 2 2 India 1362308404 17.5% 16 May~ National populat~  
FALSE 3 3 United St~ 329697230 4.23% 16 May~ National populat~  
FALSE 4 4 Indonesia 266911900 3.43% 1 Jul ~ National annual ~  
FALSE 5 5 Pakistan 220892331 2.84% 1 Jul ~ UN Projection[2]   
FALSE 6 6 Brazil 211530885 2.72% 16 May~ National populat~

Ahora uno las tablas por el identificador “Country”.

lasdostablas <- tabla\_indice\_democracia %>% inner\_join(tabla\_coronavirus, by = "Country")  
lastrestablas <- lasdostablas %>% inner\_join(tabla\_poblacion, by = "Country")

Modifiquemos por último esta tabla resultante para reflejar los casos de afectación por 100.000 habitantes.

#calculamos el numero de casos y muertes por densidad de población de cada pais  
lastrestablas <- lastrestablas %>% mutate(muertespor100000habitantes = Muertes/poblacion\*100000) %>% mutate(casospor100000habitante = Casos/poblacion\*100000)  
  
library(knitr)  
library(kableExtra)  
kable(lastrestablas)

Ranking.x

Country

Score

Procesos electorales y pluralismo

Gobierno funcional

Participacion

Cultura política

Libertades civiles

Regimen

Region

Cambios año previo

Continent

Casos

Muertes

casos confirmados últimos 14 días

Ranking.y

poblacion

% de la población mundial

fecha

fuente

muertespor100000habitantes

casospor100000habitante

1

Norway

9.87

10.00

9.64

10.00

10.00

9.71

Full democracy

Western Europe

Score: Rank:

Europe

8197

232

438

118

5367580

0.0689%

1 Jan 2020

National quarterly estimate[107]

4.3222458

152.7131407

2

Iceland

9.58

10.00

9.29

8.89

10.00

9.71

Full democracy

Western Europe

Score: Rank:

Europe

1802

10

4

172

366130

0.00470%

31 Mar 2020

National quarterly estimate[159]

2.7312703

492.1749106

3

Sweden

9.39

9.58

9.64

8.33

10.00

9.41

Full democracy

Western Europe

Score: Rank:

Europe

29207

3646

7687

88

10343403

0.133%

31 Mar 2020

National monthly estimate[82]

35.2495209

282.3732189

5

Finland

9.25

10.00

8.93

8.89

8.75

9.71

Full democracy

Western Europe

Score: 0.11Rank: 3

Europe

6228

293

1177

115

5528390

0.0710%

31 Mar 2020

National monthly estimate[104]

5.2999155

112.6548597

6

Ireland

9.24

10.00

7.86

8.33

10.00

10.00

Full democracy

Western Europe

Score: 0.09Rank:

Europe

23956

1518

3123

122

4921500

0.0632%

1 Apr 2019

National estimate[111]

30.8442548

486.7621660

7

Denmark

9.22

10.00

9.29

8.33

9.38

9.12

Full democracy

Western Europe

Score: Rank: 2

Europe

10791

537

1480

112

5824857

0.0748%

1 Apr 2020

National quarterly estimate[102]

9.2191104

185.2577668

7

Canada

9.22

9.58

9.64

7.78

9.38

9.71

Full democracy

North America

Score: 0.07Rank: 1

America

74602

5562

19541

38

38030560

0.488%

16 May 2020

National population clock[37]

14.6250805

196.1632960

9

Australia

9.09

10.00

8.93

7.78

8.75

10.00

Full democracy

Asia & Australasia

Score: Rank:

Oceania

7019

98

252

54

25710594

0.330%

16 May 2020

National population clock[49]

0.3811658

27.3000305

10

Switzerland

9.03

9.58

9.29

7.78

9.38

9.12

Full democracy

Western Europe

Score: Rank:

Europe

30431

1594

809

99

8603899

0.111%

31 Dec 2019

National provisional figure[92]

18.5264843

353.6884847

11

Netherlands

9.01

9.58

9.29

8.33

8.75

9.12

Full democracy

Western Europe

Score: 0.12Rank:

Europe

43681

5643

3890

67

17466431

0.224%

16 May 2020

National population clock[62]

32.3076878

250.0854353

12

Luxembourg

8.81

10.00

8.93

6.67

8.75

9.71

Full democracy

Western Europe

Score: Rank:

Europe

3923

104

121

163

626108

0.00804%

1 Jan 2020

National estimate[150]

16.6105528

626.5692181

13

Germany

8.68

9.58

8.57

8.33

7.50

9.41

Full democracy

Western Europe

Score: Rank:

Europe

173772

7881

12069

19

83149300

1.07%

30 Sep 2019

National estimate[18]

9.4781315

208.9879289

15

Uruguay

8.38

10.00

8.57

6.11

7.50

9.71

Full democracy

Latin America

Score: Rank:

America

732

19

84

130

3518552

0.0452%

30 Jun 2019

National annual projection[119]

0.5399949

20.8040126

16

Austria

8.29

9.58

7.86

8.33

6.88

8.82

Full democracy

Western Europe

Score: Rank:

Europe

16068

628

610

98

8902600

0.114%

1 Jan 2020

Quarterly provisional figure[91]

7.0541190

180.4865994

16

Spain

8.29

9.58

7.14

7.78

8.13

8.82

Full democracy

Western Europe

Score: 0.11Rank: 3

Europe

230183

27459

12379

30

47100396

0.605%

1 Jul 2019

National estimate[29]

58.2988729

488.7071438

18

Mauritius

8.22

9.17

8.21

5.56

8.75

9.41

Full democracy

Sub-Saharan Africa

Score: Rank: 1

Africa

332

10

0

154

1265475

0.0163%

31 Dec 2019

National estimate[141]

0.7902171

26.2352081

20

France

8.12

9.58

7.86

7.78

6.88

8.53

Full democracy

Western Europe

Score: 0.32Rank: 9

Europe

141919

27529

11734

20

67075000

0.862%

1 Apr 2020

Monthly national estimate[19]

41.0421170

211.5825568

21

Chile

8.08

9.58

8.57

5.00

8.13

9.12

Full democracy

Latin America

Score: 0.11Rank: 2

America

39542

394

22534

62

19107216

0.245%

1 Jul 2019

National annual projection[58]

2.0620482

206.9479928

22

Portugal

8.03

9.58

7.86

6.11

7.50

9.12

Full democracy

Western Europe

Score: 0.19Rank: 5

Europe

28583

1190

3393

89

10276617

0.132%

31 Dec 2018

National annual estimate[83]

11.5796862

278.1362777

24

Japan

7.99

8.75

8.21

6.67

7.50

8.82

Flawed democracy

Asia & Australasia

Score: Rank: 2

Asia

16237

725

1693

11

125960000

1.62%

1 Apr 2020

Monthly provisional estimate[11]

0.5755795

12.8906002

26

Malta

7.95

9.17

7.50

6.11

8.13

8.82

Flawed democracy

Western Europe

Score: 0.26Rank: 8

Europe

532

6

65

167

493559

0.00634%

31 Dec 2018

National estimate[153]

1.2156601

107.7885319

27

Estonia

7.90

9.58

7.86

6.67

6.88

8.53

Flawed democracy

Eastern Europe

Score: 0.07Rank: 4

Europe

1766

63

72

153

1328976

0.0171%

1 Jan 2020

National estimate[140]

4.7404919

132.8842658

28

Israel

7.86

9.17

7.86

8.89

7.50

5.88

Flawed democracy

Middle East & North Africa

Score: 0.07Rank: 2

Asia

16589

266

488

94

9197130

0.118%

16 May 2020

National population clock[87]

2.8922066

180.3714855

29

Botswana

7.81

9.17

7.14

6.11

7.50

9.12

Flawed democracy

Sub-Saharan Africa

Score: Rank: 1

Africa

24

1

1

142

2338851

0.0300%

1 Jul 2019

National annual projection[129]

0.0427560

1.0261449

31

Taiwan

7.73

9.58

8.21

6.11

5.63

9.12

Flawed democracy

Asia & Australasia

Score: Rank: 1

Asia

440

7

11

–

23596493

0.303%

31 Mar 2020

Monthly national estimate[51]

0.0296654

1.8646839

33

Belgium

7.64

9.58

8.21

5.00

6.88

8.53

Flawed democracy

Western Europe

Score: 0.14Rank: 2

Europe

54644

8959

5612

80

11534131

0.148%

1 Mar 2020

Monthly national estimate[74]

77.6738187

473.7591415

34

Cyprus

7.59

9.17

6.43

6.67

6.88

8.82

Flawed democracy

Western Europe

Score: Rank: 1

Europe

910

17

53

158

875900

0.0112%

31 Dec 2018

National annual estimate[145]

1.9408608

103.8931385

35

Italy

7.52

9.58

6.07

7.78

6.25

7.94

Flawed democracy

Western Europe

Score: 0.19Rank: 2

Europe

223885

31610

16457

23

60238522

0.774%

30 Nov 2019

Monthly national estimate[22]

52.4747271

371.6641653

36

Slovenia

7.50

9.58

6.79

6.67

6.25

8.24

Flawed democracy

Eastern Europe

Score: Rank:

Europe

1465

103

31

144

2095861

0.0269%

1 Jan 2020

National estimate[130]

4.9144480

69.8996737

36

Lithuania

7.50

9.58

6.43

6.11

6.25

9.12

Flawed democracy

Eastern Europe

Score: Rank:

Europe

1523

54

124

137

2793271

0.0359%

1 May 2020

Monthly national estimate[125]

1.9332174

54.5238897

38

Latvia

7.49

9.58

6.07

6.11

6.88

8.82

Flawed democracy

Eastern Europe

Score: 0.11Rank:

Europe

970

19

100

147

1904600

0.0245%

1 Apr 2020

Monthly national estimate[133]

0.9975848

50.9293290

39

Greece

7.43

9.58

4.86

6.67

7.50

8.53

Flawed democracy

Western Europe

Score: 0.14Rank:

Europe

2810

160

219

84

10724599

0.138%

1 Jan 2019

National estimate[78]

1.4918973

26.2014459

42

Slovakia

7.17

9.58

7.14

5.56

5.63

7.94

Flawed democracy

Eastern Europe

Score: 0.07Rank: 2

Europe

1480

27

77

117

5457873

0.0701%

31 Dec 2019

National estimate[106]

0.4946982

27.1167907

43

Malaysia

7.16

9.17

7.86

6.67

6.25

5.88

Flawed democracy

Asia & Australasia

Score: 0.28Rank: 9

Asia

6855

112

784

42

32781760

0.421%

16 May 2020

National population clock[40]

0.3416534

20.9110188

45

Colombia

7.13

9.17

6.79

5.56

5.63

8.53

Flawed democracy

Latin America

Score: 0.17Rank: 6

America

14216

546

7210

28

49395678

0.634%

30 Jun 2019

National annual projection[27]

1.1053599

28.7798459

46

Panama

7.05

9.58

6.07

6.67

5.00

7.94

Flawed democracy

Latin America

Score: Rank: 1

America

9268

266

2548

126

4218808

0.0542%

1 Jul 2019

National annual projection[115]

6.3050985

219.6829057

47

Bulgaria

7.03

9.17

6.43

7.22

4.38

7.94

Flawed democracy

Eastern Europe

Score: Rank: 1

Europe

2138

102

550

105

6951482

0.0893%

31 Dec 2019

National estimate[99]

1.4673130

30.7560316

48

Argentina

7.02

9.17

5.36

6.11

6.25

8.24

Flawed democracy

Latin America

Score: Rank: 1

America

7466

356

2947

31

44938712

0.577%

1 Jul 2019

National annual projection[30]

0.7921900

16.6137383

49

Suriname

6.98

9.17

6.43

6.67

5.00

7.65

Flawed democracy

Latin America

Score: Rank:

America

10

1

0

165

581372

0.00747%

1 Jul 2019

UN Projection[2]

0.1720069

1.7200691

50

Jamaica

6.96

8.75

7.14

4.44

6.25

8.24

Flawed democracy

Latin America

Score: 0.06Rank: 3

America

511

9

79

138

2726667

0.0350%

31 Dec 2018

National estimate[126]

0.3300733

18.7408290

51

India

6.90

8.67

6.79

6.67

5.63

6.76

Flawed democracy

Asia & Australasia

Score: 0.33Rank: 10

Asia

85940

2752

48604

2

1362308404

17.5%

16 May 2020

National population clock[4]

0.2020101

6.3084100

52

Brazil

6.86

9.58

5.36

6.11

5.00

8.24

Flawed democracy

Latin America

Score: 0.11Rank: 2

America

218223

14817

126634

6

211530885

2.72%

16 May 2020

National population clock[7]

7.0046509

103.1636586

53

Tunisia

6.72

9.17

5.71

7.22

5.63

5.88

Flawed democracy

Middle East & North Africa

Score: 0.31Rank: 10

Africa

1035

45

37

78

11722038

0.151%

1 Jul 2019

National estimate[72]

0.3838923

8.8295226

54

Philippines

6.64

9.17

5.36

7.22

4.38

7.06

Flawed democracy

Asia & Australasia

Score: 0.07Rank: 1

Asia

12091

806

3319

12

108632752

1.40%

16 May 2020

National population clock[12]

0.7419494

11.1301608

55

Ghana

6.63

8.33

5.71

6.67

6.25

6.18

Flawed democracy

Sub-Saharan Africa

Score: Rank: 2

Africa

5638

28

3564

47

30280811

0.389%

1 Jul 2019

National projection[44]

0.0924678

18.6190522

55

Hungary

6.63

8.75

6.07

5.00

6.25

7.06

Flawed democracy

Eastern Europe

Score: Rank: 2

Europe

3473

448

531

92

9769000

0.125%

1 Jan 2020

National estimate[85]

4.5859351

35.5512335

57

Poland

6.62

9.17

6.07

6.11

4.38

7.35

Flawed democracy

Eastern Europe

Score: 0.05Rank: 3

Europe

18016

907

4911

37

38379000

0.493%

31 Jan 2020

National estimate[36]

2.3632716

46.9423383

58

Peru

6.60

9.17

5.00

5.56

5.63

7.65

Flawed democracy

Latin America

Score: Rank: 1

America

84495

2393

44036

45

32131400

0.413%

30 Jun 2019

National annual projection[42]

7.4475435

262.9670665

59

Croatia

6.57

9.17

6.07

5.56

5.00

7.06

Flawed democracy

Eastern Europe

Score: Rank: 1

Europe

2222

95

137

128

4076246

0.0524%

31 Dec 2018

National annual estimate[117]

2.3305757

54.5109397

60

Lesotho

6.54

9.17

4.50

6.67

5.63

6.76

Flawed democracy

Sub-Saharan Africa

Score: 0.1Rank: 4

Africa

1

0

1

146

2007201

0.0258%

10 Apr 2016

2016 census result[132]

0.0000000

0.0498206

62

Mongolia

6.50

9.17

5.71

5.56

5.00

7.06

Flawed democracy

Asia & Australasia

Score: Rank:

Asia

135

0

96

132

3317802

0.0426%

16 May 2020

National population clock[120]

0.0000000

4.0689589

63

Romania

6.49

9.17

5.71

5.56

4.38

7.65

Flawed democracy

Eastern Europe

Score: 0.11Rank: 3

Europe

16437

1056

3870

60

19405156

0.249%

1 Jan 2019

National annual estimate[56]

5.4418527

84.7042920

64

Indonesia

6.48

7.92

7.14

6.11

5.63

5.59

Flawed democracy

Asia & Australasia

Score: 0.09Rank: 1

Asia

16496

1076

5945

4

266911900

3.43%

1 Jul 2019

National annual projection[6]

0.4031293

6.1803164

65

Namibia

6.43

6.58

5.36

6.67

5.63

7.94

Flawed democracy

Sub-Saharan Africa

Score: 0.18Rank: 4

Africa

16

0

0

140

2458936

0.0316%

1 Jul 2019

National projection[128]

0.0000000

0.6506879

66

Serbia

6.41

8.25

5.36

6.11

5.00

7.35

Flawed democracy

Eastern Europe

Score: Rank: 3

Europe

10438

225

1233

104

6963764

0.0894%

1 Jan 2019

National annual estimate[98]

3.2310113

149.8902031

67

Ecuador

6.33

8.75

5.36

6.11

4.38

7.06

Flawed democracy

Latin America

Score: 0.06Rank: 1

America

31467

2594

9122

66

17486468

0.225%

16 May 2020

National population clock[61]

14.8343279

179.9505766

68

Thailand

6.32

7.42

5.36

6.11

6.25

6.47

Flawed democracy

Asia & Australasia

Score: 1.69Rank: 38

Asia

3025

56

65

21

66505655

0.854%

16 May 2020

National population clock[20]

0.0842034

4.5484854

70

Paraguay

6.24

8.75

5.71

5.00

4.38

7.35

Flawed democracy

Latin America

Score: Rank:

America

759

11

426

102

7252672

0.0932%

1 Jul 2020

National annual projection[96]

0.1516682

10.4651086

71

Guyana

6.15

6.92

5.36

6.11

5.00

7.35

Flawed democracy

Latin America

Score: 0.52Rank: 17

America

116

10

34

160

782766

0.0101%

1 Jul 2019

UN Projection[2]

1.2775210

14.8192436

73

Mexico

6.09

7.83

6.07

7.22

3.13

6.18

Flawed democracy

Latin America

Score: 0.1Rank: 2

America

45032

4767

24293

10

126577691

1.63%

1 Jul 2019

National annual projection[10]

3.7660665

35.5765693

75

Singapore

6.02

3.92

7.86

5.00

6.25

7.06

Flawed democracy

Asia & Australasia

Score: 0.36Rank: 9

Asia

26891

21

9790

113

5703600

0.0733%

30 Jun 2019

National estimate[103]

0.3681885

471.4741567

78

Ukraine

5.90

7.42

2.71

6.67

6.25

6.47

Hybrid regime

Eastern Europe

Score: 0.21Rank: 6

Europe

17330

483

6469

34

41858119

0.538%

1 Mar 2020

Monthly national estimate[33]

1.1538980

41.4017649

79

Albania

5.89

7.00

5.36

4.44

5.00

7.65

Hybrid regime

Eastern Europe

Score: 0.09Rank: 3

Europe

916

31

134

135

2845955

0.0366%

1 Jan 2020

National annual estimate[123]

1.0892653

32.1860325

80

Bangladesh

5.88

7.83

6.07

6.11

4.38

5.00

Hybrid regime

Asia & Australasia

Score: 0.31Rank: 8

Asia

20065

298

11827

8

168619464

2.17%

16 May 2020

National population clock[8]

0.1767293

11.8995752

81

Fiji

5.85

6.58

5.36

6.11

5.63

5.59

Hybrid regime

Asia & Australasia

Score: Rank: 2

Oceania

18

0

0

157

884887

0.0114%

17 Sep 2017

National census result[144]

0.0000000

2.0341580

82

Senegal

5.81

6.08

6.07

4.44

6.25

6.18

Hybrid regime

Sub-Saharan Africa

Score: 0.34Rank: 9

Africa

2310

25

1286

68

16705608

0.215%

2020

National annual projection[63]

0.1496503

13.8276919

83

Moldova

5.75

6.58

4.64

6.11

4.38

7.06

Hybrid regime

Eastern Europe

Score: 0.1Rank: 4

Europe

5745

197

1765

139

2681735

0.0344%

1 Jan 2019

National estimate[127]

7.3459906

214.2269837

84

Montenegro

5.65

5.67

5.36

6.11

4.38

6.76

Hybrid regime

Eastern Europe

Score: 0.09Rank: 3

Europe

324

9

2

164

622359

0.00799%

1 Jan 2018

National estimate[151]

1.4461107

52.0599847

85

Madagascar

5.64

7.92

3.57

6.11

5.63

5.00

Hybrid regime

Sub-Saharan Africa

Score: 0.42Rank: 10

Africa

238

0

103

52

26251309

0.337%

2020

Official Projection[47]

0.0000000

0.9066215

86

Armenia

5.54

7.50

5.36

6.11

3.13

5.59

Hybrid regime

Eastern Europe

Score: 0.75Rank: 17

Europe

4044

52

1896

134

2956900

0.0380%

31 Mar 2020

National quarterly estimate[122]

1.7585985

136.7648551

87

Malawi

5.50

6.08

4.29

5.00

6.25

5.88

Hybrid regime

Sub-Saharan Africa

Score: 0.01Rank: 3

Africa

63

3

26

61

19129952

0.246%

1 Jul 2020

UN Projection[57]

0.0156822

0.3293265

88

Liberia

5.45

7.42

3.07

5.56

5.63

5.59

Hybrid regime

Sub-Saharan Africa

Score: 0.1Rank: 5

Africa

219

20

67

124

4475353

0.0575%

1 Jul 2019

National projection[113]

0.4468921

4.8934687

89

Georgia

5.42

7.83

3.21

6.11

4.38

5.59

Hybrid regime

Eastern Europe

Score: 0.08Rank:

Europe

671

12

89

129

3716858

0.0477%

1 Jan 2020

National annual estimate[118]

0.3228533

18.0528823

89

Honduras

5.42

7.83

4.29

4.44

4.38

6.18

Hybrid regime

Latin America

Score: 0.21Rank: 4

America

2460

134

1561

95

9158345

0.118%

1 Jul 2019

National annual projection[88]

1.4631465

26.8607483

91

Bhutan

5.30

8.75

6.79

2.78

4.38

3.82

Hybrid regime

Asia & Australasia

Score: Rank: 3

Asia

21

0

14

161

741672

0.00953%

1 Jul 2019

National annual projection[147]

0.0000000

2.8314403

92

Nepal

5.28

4.83

5.36

5.00

5.63

5.59

Hybrid regime

Asia & Australasia

Score: 0.1Rank: 5

Asia

276

0

217

49

29996478

0.385%

1 Jul 2020

National annual projection[46]

0.0000000

0.9201080

93

Guatemala

5.26

6.92

4.64

3.89

4.38

6.47

Hybrid regime

Latin America

Score: 0.34Rank: 6

America

1643

30

999

69

16604026

0.213%

1 Jul 2019

National annual projection[64]

0.1806791

9.8951905

94

Kenya

5.18

3.50

5.71

6.67

5.63

4.41

Hybrid regime

Sub-Saharan Africa

Score: 0.07Rank: 4

Africa

781

45

370

29

47564296

0.611%

31 Aug 2019

2019 census result[28]

0.0946088

1.6419879

96

Morocco

5.10

5.25

4.64

5.56

5.63

4.41

Hybrid regime

Middle East & North Africa

Score: 0.11Rank: 4

Africa

6652

190

2083

39

35899132

0.461%

16 May 2020

National population clock[38]

0.5292607

18.5296959

97

Benin

5.09

4.67

5.71

4.44

5.63

5.00

Hybrid regime

Sub-Saharan Africa

Score: 0.65Rank: 16

Africa

339

2

249

77

11733059

0.151%

1 Jul 2019

National projection annual[71]

0.0170459

2.8892721

97

Zambia

5.09

4.75

2.93

4.44

6.88

6.47

Hybrid regime

Sub-Saharan Africa

Score: 0.52Rank: 11

Africa

668

7

559

64

17885422

0.230%

1 Jul 2020

National annual projection[60]

0.0391380

3.7348853

99

Uganda

5.02

4.33

3.57

4.44

6.88

5.88

Hybrid regime

Sub-Saharan Africa

Score: 0.18Rank: 3

Africa

203

0

118

35

41590300

0.534%

1 Jul 2020

National annual projection[34]

0.0000000

0.4880946

100

Mali

4.92

6.42

3.07

3.89

5.63

5.59

Hybrid regime

Sub-Saharan Africa

Score: 0.49Rank: 9

Africa

806

46

298

59

20250833

0.260%

1 Jul 2020

UN Projection[55]

0.2271511

3.9800832

101

Kyrgyzstan

4.89

6.08

2.93

6.67

3.75

5.00

Hybrid regime

Eastern Europe

Score: 0.22Rank: 3

Asia

1117

14

348

108

6533500

0.0839%

1 Feb 2020

National estimate[100]

0.2142802

17.0965026

104

Bolivia

4.84

4.75

3.93

5.00

3.75

6.76

Hybrid regime

Latin America

Score: 0.86Rank: 21

America

3577

164

2348

81

11469896

0.147%

1 Jul 2019

National projection annual[75]

1.4298299

31.1859846

105

Haiti

4.57

4.75

2.07

3.89

6.25

5.88

Hybrid regime

Latin America

Score: 0.34Rank: 3

America

310

20

225

79

11577779

0.149%

1 Jul 2019

National annual projection[73]

0.1727447

2.6775429

106

Lebanon

4.36

3.92

1.50

6.67

5.00

4.71

Hybrid regime

Middle East & North Africa

Score: 0.27Rank:

Asia

891

26

162

107

6825442

0.0877%

1 Jul 2020

UN Projection[2]

0.3809277

13.0540996

107

Gambia

4.33

4.00

4.29

3.33

5.63

4.41

Hybrid regime

Sub-Saharan Africa

Score: 0.02Rank: 4

Africa

23

1

11

141

2347706

0.0302%

1 Jul 2019

UN Projection[2]

0.0425948

0.9796797

108

Pakistan

4.25

6.08

5.71

2.22

2.50

4.71

Hybrid regime

Asia & Australasia

Score: 0.08Rank: 4

Asia

38799

834

20685

5

220892331

2.84%

1 Jul 2020

UN Projection[2]

0.3775595

17.5646659

109

Nigeria

4.12

5.17

3.93

3.33

3.75

4.41

Hybrid regime

Sub-Saharan Africa

Score: 0.32Rank: 1

Africa

5445

171

3275

7

206139587

2.65%

1 Jul 2020

UN Projection[2]

0.0829535

2.6414140

110

Turkey

4.09

3.08

5.00

5.00

5.00

2.35

Hybrid regime

Western Europe

Score: 0.28Rank:

Asia

146457

4055

24065

18

83154997

1.07%

31 Dec 2019

National annual estimate[17]

4.8764357

176.1253145

113

Algeria

4.01

3.08

2.86

5.00

5.00

4.12

Hybrid regime

Middle East & North Africa

Score: 0.51Rank: 13

Africa

6629

536

2475

32

43000000

0.552%

1 Jan 2019

National annual projection[31]

1.2465116

15.4162791

114

Jordan

3.93

3.58

4.29

3.89

4.38

3.53

Authoritarian

Middle East & North Africa

Score: Rank: 1

Asia

596

9

137

86

10681252

0.137%

16 May 2020

National population clock[80]

0.0842598

5.5798702

114

Kuwait

3.93

3.58

4.29

3.89

4.38

3.53

Authoritarian

Middle East & North Africa

Score: 0.08Rank: 2

Asia

12860

96

8483

125

4420110

0.0568%

1 Jan 2019

National annual estimate[114]

2.1718916

290.9429856

116

Mauritania

3.92

3.50

3.57

5.00

3.13

4.41

Authoritarian

Sub-Saharan Africa

Score: 0.1Rank: 3

Africa

29

3

21

127

4077347

0.0524%

1 Jul 2019

National annual projection[116]

0.0735773

0.7112468

117

Palestine

3.89

3.33

0.14

7.78

4.38

3.82

Authoritarian

Middle East & North Africa

Score: 0.5Rank: 8

Asia

554

4

37

121

4976684

0.0639%

1 Jul 2019

National annual projection[110]

0.0803748

11.1319103

118

Iraq

3.74

5.25

0.00

6.67

5.00

1.76

Authoritarian

Middle East & North Africa

Score: 0.32Rank: 4

Asia

3193

117

1040

36

40150200

0.516%

1 Jul 2020

National annual projection[35]

0.2914058

7.9526378

119

Angola

3.72

2.25

2.86

5.56

5.00

2.94

Authoritarian

Sub-Saharan Africa

Score: 0.1Rank: 4

Africa

48

2

19

46

31127674

0.400%

2020

National projection[43]

0.0064252

0.1542036

120

Mozambique

3.65

2.58

2.14

5.00

5.00

3.53

Authoritarian

Sub-Saharan Africa

Score: 0.2Rank: 4

Africa

119

0

40

48

30066648

0.386%

2020

National projection[45]

0.0000000

0.3957874

121

Gabon

3.61

2.58

2.21

4.44

5.00

3.82

Authoritarian

Sub-Saharan Africa

Score: Rank: 3

Africa

1209

10

901

143

2172579

0.0279%

1 Jul 2019

UN Projection[2]

0.4602825

55.6481490

122

Myanmar

3.55

3.08

3.93

2.78

5.63

2.35

Authoritarian

Asia & Australasia

Score: 0.28Rank: 4

Asia

182

6

31

26

54817919

0.704%

2020

National annual projection[25]

0.0109453

0.3320082

122

Nicaragua

3.55

1.25

2.86

3.89

5.63

4.12

Authoritarian

Latin America

Score: 0.08Rank:

America

25

8

11

110

6460411

0.0830%

30 Jun 2018

National estimate[101]

0.1238311

0.3869723

124

Cambodia

3.53

0.83

4.64

3.33

5.63

3.24

Authoritarian

Asia & Australasia

Score: 0.06Rank: 1

Asia

122

0

0

72

15288489

0.196%

3 Mar 2019

Provisional 2019 census result[66]

0.0000000

0.7979860

125

Ethiopia

3.44

0.42

3.57

5.56

5.00

2.65

Authoritarian

Sub-Saharan Africa

Score: 0.09Rank: 3

Africa

287

5

154

14

98665000

1.27%

1 Jul 2019

National annual projection[14]

0.0050677

0.2908833

126

Togo

3.30

3.17

1.79

3.33

5.00

3.24

Authoritarian

Sub-Saharan Africa

Score: 0.2Rank: 12

Africa

263

11

140

101

7538000

0.0968%

1 Jul 2019

National annual projection[94]

0.1459273

3.4889891

127

Niger

3.29

2.92

1.14

3.33

4.38

4.71

Authoritarian

Sub-Saharan Africa

Score: 0.47Rank: 7

Africa

885

51

157

56

22314743

0.287%

1 Jul 2019

National annual projection[52]

0.2285485

3.9659879

128

Qatar

3.19

0.00

4.29

2.22

5.63

3.82

Authoritarian

Middle East & North Africa

Score: Rank: 5

Asia

29425

14

15329

136

2795484

0.0359%

31 Mar 2020

Monthly national estimate[124]

0.5008077

1052.5905353

129

Rwanda

3.16

1.42

4.29

2.78

4.38

2.94

Authoritarian

Sub-Saharan Africa

Score: 0.19Rank: 1

Africa

287

0

38

75

12374397

0.159%

1 Jul 2019

National projection annual[69]

0.0000000

2.3193049

129

Zimbabwe

3.16

0.00

2.50

4.44

5.63

3.24

Authoritarian

Sub-Saharan Africa

Score: Rank: 5

Africa

42

4

8

73

15159624

0.195%

1 Jul 2019

National annual projection[67]

0.0263859

0.2770517

131

Comoros

3.15

2.08

2.21

3.89

3.75

3.82

Authoritarian

Sub-Saharan Africa

Score: 0.56Rank: 10

Africa

11

1

10

159

873724

0.0112%

1 Jul 2019

National estimate[146]

0.1144526

1.2589788

132

Eswatini

3.14

0.92

2.86

2.78

5.63

3.53

Authoritarian

Sub-Saharan Africa

Score: 0.11Rank: 9

Africa

190

2

84

155

1093238

0.0140%

11 May 2017

National census result[142]

0.1829428

17.3795642

132

Guinea

3.14

3.50

0.43

4.44

4.38

2.94

Authoritarian

Sub-Saharan Africa

Score: Rank: 4

Africa

2531

15

994

76

12218357

0.157%

1 Jul 2019

National projection[70]

0.1227661

20.7147328

134

Russia

3.11

2.17

1.79

5.00

2.50

4.12

Authoritarian

Eastern Europe

Score: 0.17Rank: 10

Europe

262843

2418

148412

9

146745098

1.88%

1 Jan 2020

National estimate[9]

1.6477552

179.1153528

136

Vietnam

3.08

0.00

3.21

3.89

5.63

2.65

Authoritarian

Asia & Australasia

Score: Rank: 3

Asia

313

0

43

15

96208984

1.24%

1 Apr 2019

Preliminary 2019 census result[15]

0.0000000

0.3253334

137

Egypt

3.06

2.67

3.21

3.33

3.75

2.35

Authoritarian

Middle East & North Africa

Score: 0.3Rank: 10

Africa

11228

592

5333

13

100387163

1.29%

16 May 2020

National population clock[13]

0.5897168

11.1846970

137

Oman

3.06

0.08

3.93

2.78

4.38

4.12

Authoritarian

Middle East & North Africa

Score: 0.02Rank: 3

Asia

4625

19

2178

123

4664790

0.0599%

1 Jan 2020

National estimate[112]

0.4073067

99.1470141

139

Kazakhstan

2.94

0.50

2.14

4.44

4.38

3.24

Authoritarian

Eastern Europe

Score: Rank: 5

Asia

5850

34

2179

63

18701576

0.240%

16 May 2020

National population clock[59]

0.1818029

31.2807862

140

Venezuela

2.88

0.00

1.79

5.00

4.38

3.24

Authoritarian

Latin America

Score: 0.28Rank: 6

America

459

10

124

44

32219521

0.414%

30 Jun 2019

National annual projection

0.0310371

1.4246022

141

Afghanistan

2.85

3.42

0.64

3.89

2.50

3.82

Authoritarian

Asia & Australasia

Score: 0.12Rank: 2

Asia

6402

168

4067

43

32225560

0.414%

1 Jul 2019

National annual estimate[41]

0.5213253

19.8662180

141

Cameroon

2.85

1.67

2.50

3.33

4.38

2.35

Authoritarian

Sub-Saharan Africa

Score: 0.43Rank: 9

Africa

3105

140

1036

51

26545864

0.341%

1 Jul 2020

UN Projection[2]

0.5273891

11.6967374

143

Cuba

2.84

0.00

3.57

3.33

4.38

2.94

Authoritarian

Latin America

Score: 0.16Rank: 1

America

1840

79

303

82

11209628

0.144%

31 Dec 2018

National annual estimate[76]

0.7047513

16.4144609

144

Djibouti

2.77

0.42

1.29

3.89

5.63

2.65

Authoritarian

Sub-Saharan Africa

Score: 0.1Rank: 2

Africa

1309

4

212

156

1078373

0.0139%

1 Jul 2019

National annual projection[143]

0.3709292

121.3865703

146

Azerbaijan

2.75

0.50

3.21

2.78

3.75

3.53

Authoritarian

Eastern Europe

Score: 0.1Rank: 3

Europe

2980

36

1126

90

10067108

0.129%

1 Jan 2020

National estimate[84]

0.3576002

29.6013513

147

Sudan

2.70

0.00

1.79

5.56

5.00

1.18

Authoritarian

Middle East & North Africa

Score: 0.55Rank: 8

Africa

1964

91

1522

33

42509080

0.546%

16 May 2020

National population clock[32]

0.2140719

4.6201894

149

Bahrain

2.55

0.83

2.71

2.78

4.38

2.06

Authoritarian

Middle East & North Africa

Score: 0.16Rank: 1

Asia

6583

12

3413

149

1543300

0.0198%

1 Jul 2019

National annual projection[136]

0.7775546

426.5534893

150

Belarus

2.48

0.92

2.00

2.78

4.38

2.35

Authoritarian

Eastern Europe

Score: 0.65Rank: 13

Europe

27730

156

12813

93

9397800

0.121%

1 Apr 2020

National annual estimate[86]

1.6599630

295.0690587

151

Iran

2.38

0.00

2.86

4.44

3.13

1.47

Authoritarian

Middle East & North Africa

Score: 0.07Rank: 1

Asia

116635

6902

20989

17

83451104

1.07%

16 May 2020

National population clock[16]

8.2707114

139.7644781

152

Eritrea

2.37

0.00

2.14

1.67

6.88

1.18

Authoritarian

Sub-Saharan Africa

Score: Rank: 1

Africa

39

0

0

131

3497117

0.0449%

1 Jul 2019

UN Projection[2]

0.0000000

1.1152043

153

China

2.26

0.00

4.29

3.33

2.50

1.18

Authoritarian

Asia & Australasia

Score: 1.06Rank: 23

Asia

84038

4637

79

1

1402669040

18.0%

16 May 2020

National population clock[3]

0.3305840

5.9912921

154

Burundi

2.15

0.00

0.07

3.33

5.00

2.35

Authoritarian

Sub-Saharan Africa

Score: 0.18Rank: 1

Africa

27

1

12

83

10953317

0.141%

1 Jul 2019

National annual projection[77]

0.0091297

0.2465007

155

Laos

2.14

0.00

2.86

1.67

5.00

1.18

Authoritarian

Asia & Australasia

Score: 0.23Rank: 4

Asia

19

0

0

103

7123205

0.0915%

1 Jul 2019

National annual projection[97]

0.0000000

0.2667339

156

Libya

2.02

0.00

0.00

2.78

4.38

2.94

Authoritarian

Middle East & North Africa

Score: 0.17Rank: 2

Africa

64

3

1

106

6871287

0.0883%

1 Jul 2020

UN Projection[2]

0.0436599

0.9314121

157

Uzbekistan

2.01

0.08

1.86

2.22

5.00

0.88

Authoritarian

Eastern Europe

Score: Rank: 1

Asia

2691

11

597

41

34185539

0.439%

16 May 2020

National population clock[39]

0.0321773

7.8717495

158

Yemen

1.95

0.00

0.00

3.89

5.00

0.88

Authoritarian

Middle East & North Africa

Score: Rank:

Asia

106

15

99

50

29825968

0.383%

1 Jul 2020

UN Projection[2]

0.0502917

0.3553950

159

Tajikistan

1.93

0.08

0.79

1.67

6.25

0.88

Authoritarian

Eastern Europe

Score: Rank:

Asia

1118

33

1103

96

9127000

0.117%

1 Jan 2019

National estimate[89]

0.3615646

12.2493700

163

Chad

1.61

0.00

0.00

1.67

3.75

2.65

Authoritarian

Sub-Saharan Africa

Score: Rank:

Africa

428

48

355

70

16244513

0.209%

2020

National annual projection[65]

0.2954844

2.6347358

164

Syria

1.43

0.00

0.00

2.78

4.38

0.00

Authoritarian

Middle East & North Africa

Score: Rank: 2

Asia

50

3

6

65

17500657

0.225%

1 Jul 2020

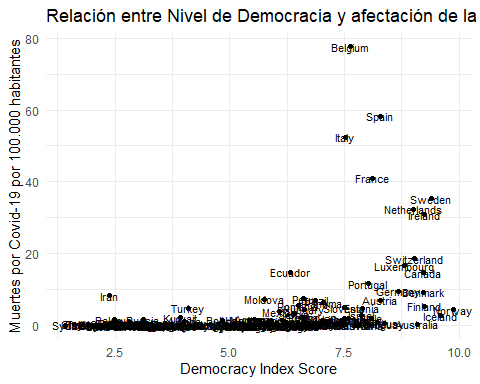
UN Projection[2]

0.0171422

0.2857036

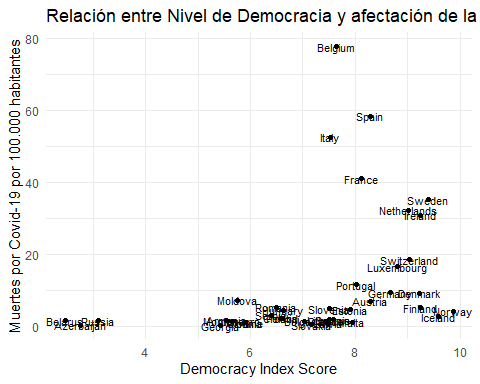
Una vez tenemos todos los datos integrados y acomodados, intentemos observar correlaciones entre los indicadores que hemos tenido en cuenta:

p <- ggplot(lastrestablas, aes(Score, muertespor100000habitantes))  
p + geom\_point() + geom\_text(aes(label=Country), size=3) +  
labs(title = "Relación entre Nivel de Democracia y afectación de la pandemia Covid-19") +  
ylab("Muertes por Covid-19 por 100.000 habitantes") +  
xlab("Democracy Index Score") + theme\_minimal()



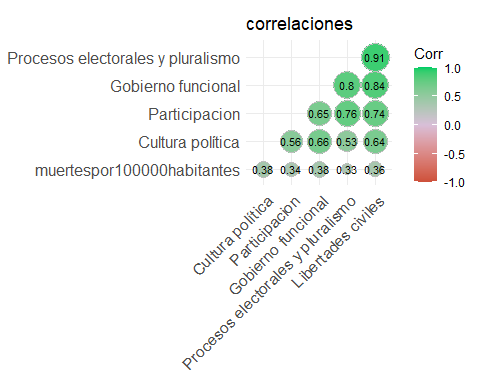
En Europa:

lastrestablaseuropa <- lastrestablas %>% filter(Continent=="Europe")  
  
p <- ggplot(lastrestablaseuropa, aes(Score, muertespor100000habitantes))  
p + geom\_point() + geom\_text(aes(label=Country), size=3) +  
labs(title = "Relación entre Nivel de Democracia y afectación de la pandemia Covid-19") +  
ylab("Muertes por Covid-19 por 100.000 habitantes") +  
xlab("Democracy Index Score") + theme\_minimal()



Probemos de visualizar un correlograma de los indicadores que tenemos:

library(ggcorrplot)  
lastrestablas <- lastrestablas %>% select(c("Procesos electorales y pluralismo", "Gobierno funcional", "Participacion", "Cultura política", "Libertades civiles", "muertespor100000habitantes"))  
corr = cor(lastrestablas)  
  
ggcorrplot(corr, hc.order = T,  
 type = "lower",  
 lab =T,  
 lab\_size =3,  
 method="circle",  
 colors = c("tomato3","thistle","springgreen3"),  
 title="correlaciones",  
 ggtheme=theme\_minimal)



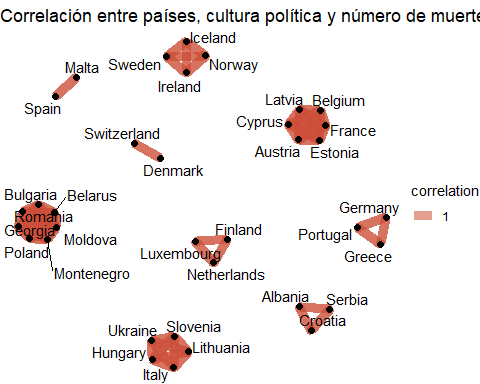
Quizás el nivel de cultura política o el que el gobierno funcione pueda afectar algo a como se gestiona una pandemia y en el número de muertes producidas?

Veamos por países la correlación entre nivel Cultura política y muertes por 100.000 habitantes:

library(widyr)  
cors <- lastrestablaseuropa %>% pairwise\_cor(Country, "Cultura política", muertespor100000habitantes)  
cors %>% arrange(correlation)

FALSE # A tibble: 1,482 x 3  
FALSE item1 item2 correlation  
FALSE <chr> <chr> <dbl>  
FALSE 1 Slovakia Norway -0.0833  
FALSE 2 Norway Slovakia -0.0833  
FALSE 3 Denmark Norway -0.0833  
FALSE 4 Spain Norway -0.0833  
FALSE 5 France Norway -0.0833  
FALSE 6 Cyprus Norway -0.0833  
FALSE 7 Hungary Norway -0.0833  
FALSE 8 Poland Norway -0.0833  
FALSE 9 Serbia Norway -0.0833  
FALSE 10 Georgia Iceland -0.0833  
FALSE # ... with 1,472 more rows

library(ggraph)  
library(igraph)  
cors %>%  
 filter (correlation >.4) %>%   
 graph\_from\_data\_frame() %>%  
 ggraph(layout ="fr") +  
 geom\_edge\_link(aes(alpha = correlation, width =correlation), edge\_colour = "tomato3") +  
 geom\_node\_point(size = 2, color ="black") +  
 geom\_node\_text(aes(label = name), repel = T) +  
 theme\_void() +  
 labs(title = "Correlación entre países, cultura política y número de muertes por covid-19")



Ahora observemos la correlación entre nivel Gobierno funcional y muertes por 100.000 habitantes:

library(widyr)  
corsgf <- lastrestablaseuropa %>% pairwise\_cor(Country, `Gobierno funcional`, muertespor100000habitantes)  
corsgf %>% arrange(correlation)

FALSE # A tibble: 1,482 x 3  
FALSE item1 item2 correlation  
FALSE <chr> <chr> <dbl>  
FALSE 1 Spain Finland -0.0556  
FALSE 2 Portugal Finland -0.0556  
FALSE 3 Estonia Finland -0.0556  
FALSE 4 Finland Spain -0.0556  
FALSE 5 Montenegro Spain -0.0556  
FALSE 6 Finland Portugal -0.0556  
FALSE 7 Finland Estonia -0.0556  
FALSE 8 Montenegro Latvia -0.0556  
FALSE 9 Georgia Slovakia -0.0556  
FALSE 10 Montenegro Romania -0.0556  
FALSE # ... with 1,472 more rows

library(ggraph)  
library(igraph)  
corsgf %>%  
 filter (correlation >.4) %>%   
 graph\_from\_data\_frame() %>%  
 ggraph(layout ="fr") +  
 geom\_edge\_link(aes(alpha = correlation, width =correlation), edge\_colour = "tomato3") +  
 geom\_node\_point(size = 2, color ="black") +  
 geom\_node\_text(aes(label = name), repel = T) +  
 theme\_void() +  
 labs(title = "Correlación entre países, gobierno funcional y número de muertes por covid-19")

