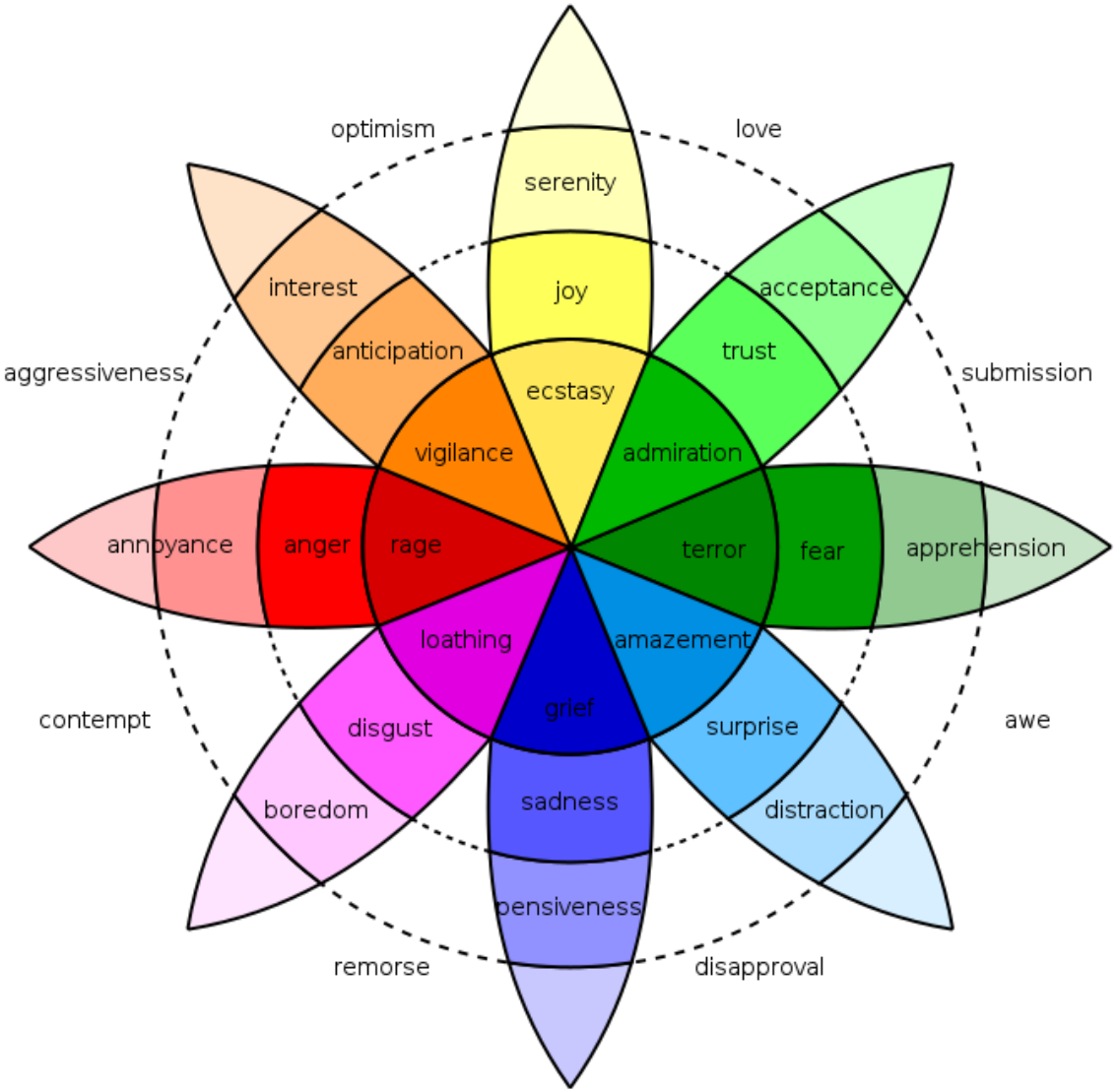
ADATVIZUALIZÁCIÓ SPSS MODELERBEN

Máté Anna
Mészáros Evelin

Clementine

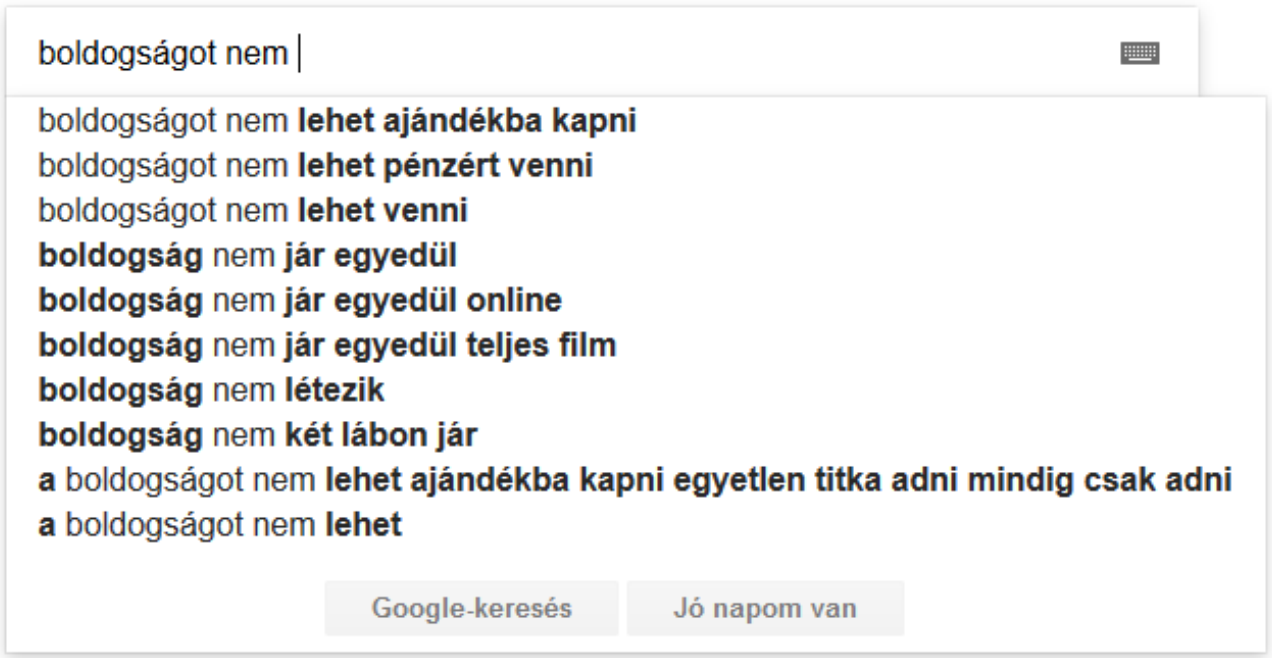
BOLDOGSÁG I.

A boldogság pozitív érzelmekkel jellemezhető mentális állapot, amely a megelégedettségtől az egészen intenzív örömérzésig terjedhet.



BOLDOGSÁG II.

- Mitől függ?
- Hogyan mérhető?



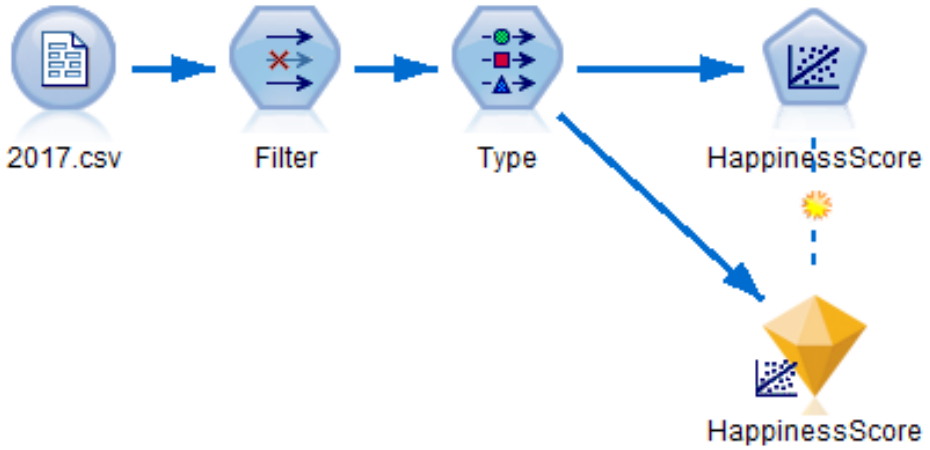
Kifogásolható tartalmú várható kifejezések jelzése

WORLD HAPPINESS REPORT

- Boldogság
- Gazdasági helyzet
- Egészség
- Családi kapcsolatok
- Szabadság
- Szabadság
- Nagylelkűség
- Közbizalom



A MODELL



Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,801[a]	,642	,635	,429758

a. Predictors: (Constant), Trust, Family, Generosity, Freedom, Health, Economy

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	160,105	6	26,684	104,535	,000[b]
	Residual	35,993	149	,255		
	Total	197,971	154			

a. Dependent Variable: HappinessScore

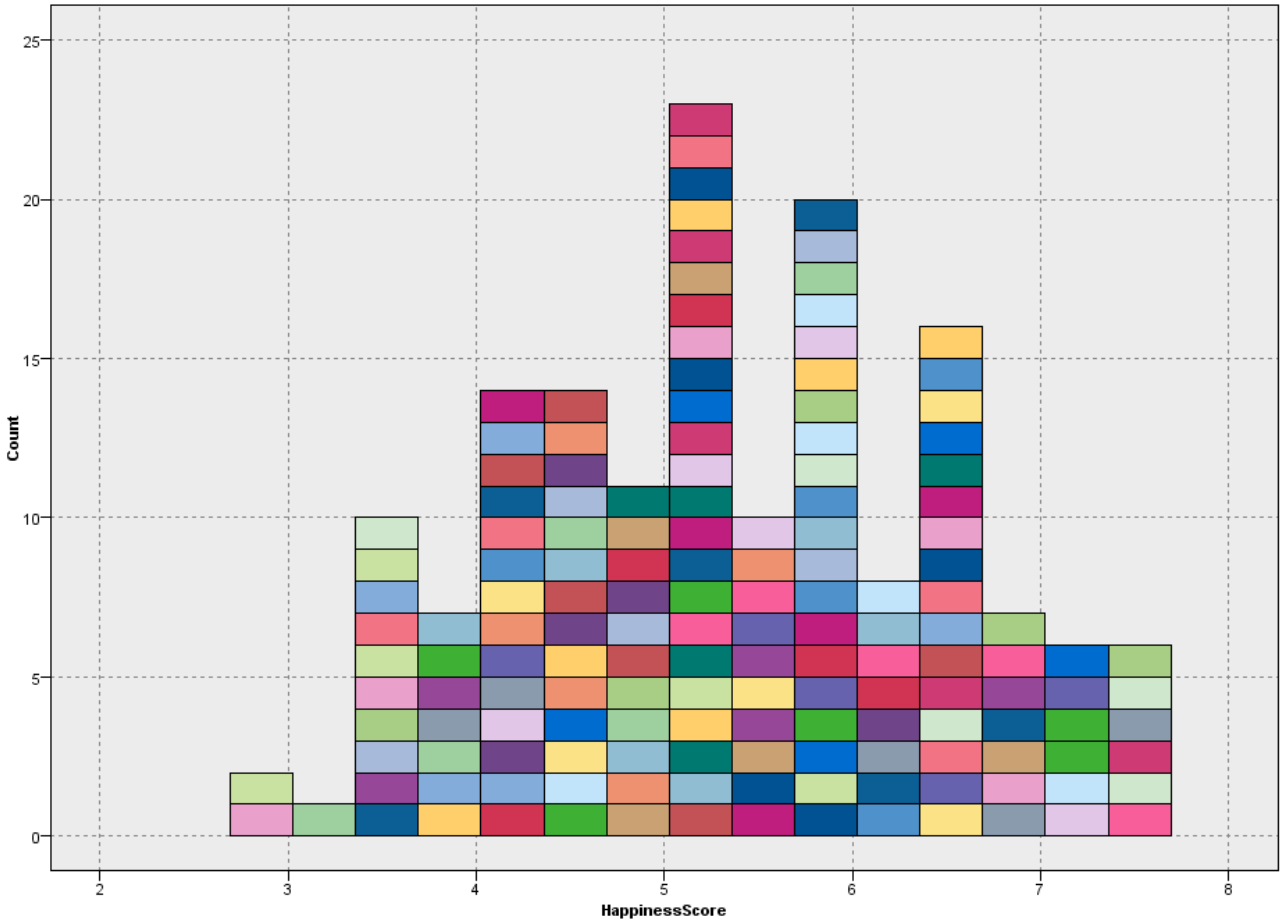
b. Predictors: (Constant), Trust, Family, Generosity, Freedom, Health, Economy

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,743	,187		9,302	,000
	Economy	,784	,205	,292	3,828	,000
	Family	1,116	,202	,264	5,532	,000
	Health	1,268	,322	,278	4,000	,000
	Freedom	1,476	,343	,156	4,299	,000
	Generosity	,381	,328	,046	1,158	,249
	Trust	,627	,454	,074	1,797	,074

a. Dependent Variable: HappinessScore

VIZUALIZÁCIÓ I.



Country

Afghanistan	Ecuador	Libya	Saudi Arabia
Albania	Egypt	Lithuania	Senegal
Algeria	El Salvador	Luxembourg	Serbia
Angola	Estonia	Macedonia	Sierra Leone
Argentina	Ethiopia	Madagascar	Singapore
Armenia	Finland	Malawi	Slovakia
Australia	France	Malaysia	Slovenia
Austria	Gabon	Mali	Somalia
Azerbaijan	Georgia	Malta	South Africa
Bahrain	Germany	Mauritania	South Korea
Bangladesh	Ghana	Mauritius	South Sudan
Belarus	Greece	Mexico	Spain
Belgium	Guatemala	Moldova	Sri Lanka
Belize	Guinea	Mongolia	Sudan
Benin	Haiti	Montenegro	Sweden
Bhutan	Honduras	Morocco	Switzerland
Bolivia	Hong Kong	Mozambique	Syria
Bosnia and Herzegovina	Hungary	Myanmar	Taiwan Province of China
Botswana	Iceland	Namibia	Tajikistan
Brazil	India	Nepal	Tanzania
Bulgaria	Indonesia	Netherlands	Thailand
Burkina Faso	Iran	New Zealand	Togo
Burundi	Iraq	Nicaragua	Trinidad and Tobago
Cambodia	Ireland	Niger	Tunisia
Cameroon	Israel	Nigeria	Turkey
Canada	Italy	North Cyprus	Turkmenistan
Central African Republic	Ivory Coast	Norway	Uganda
Chad	Jamaica	Pakistan	Ukraine
Chile	Japan	Palestinian Territories	United Arab Emirates
China	Jordan	Panama	United Kingdom
Colombia	Kazakhstan	Paraguay	United States
Congo (Brazzaville)	Kenya	Peru	Uruguay
Congo (Kinshasa)	Kosovo	Philippines	Uzbekistan
Costa Rica	Kuwait	Poland	Venezuela
Croatia	Kyrgyzstan	Portugal	Vietnam
Cyprus	Latvia	Qatar	Yemen
Czech Republic	Lebanon	Romania	Zambia
Denmark	Lesotho	Russia	Zimbabwe
Dominican Republic	Liberia	Rwanda	

python + SPSS Modeler

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VIZUALIZÁCIÓ II.

python + SPSS Modeler

jupyter Last Checkpoint: 19 órája (unsaved changes) Logout

File Edit View Insert Cell Kernel Widgets Help Not Trusted Python 2

Run Markdown

In [4]:
```
sns.set(style="darkgrid", palette="muted")
#current_palette = sns.color_palette()
ax=plt.axes()
sns.distplot(df["Happiness.Score"])
ax.set_title("Happiness")
plt.show()
```



matplotlib

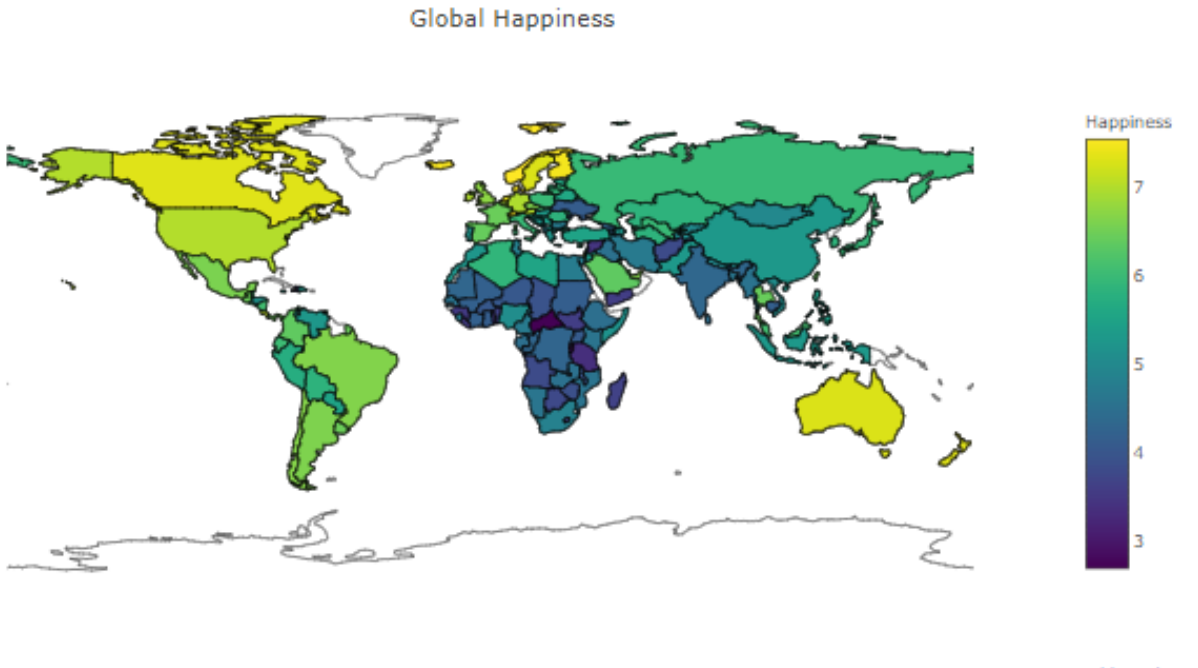
Seaborn

plotly

https://matplotlib.org/examples/color/colormaps_reference.html

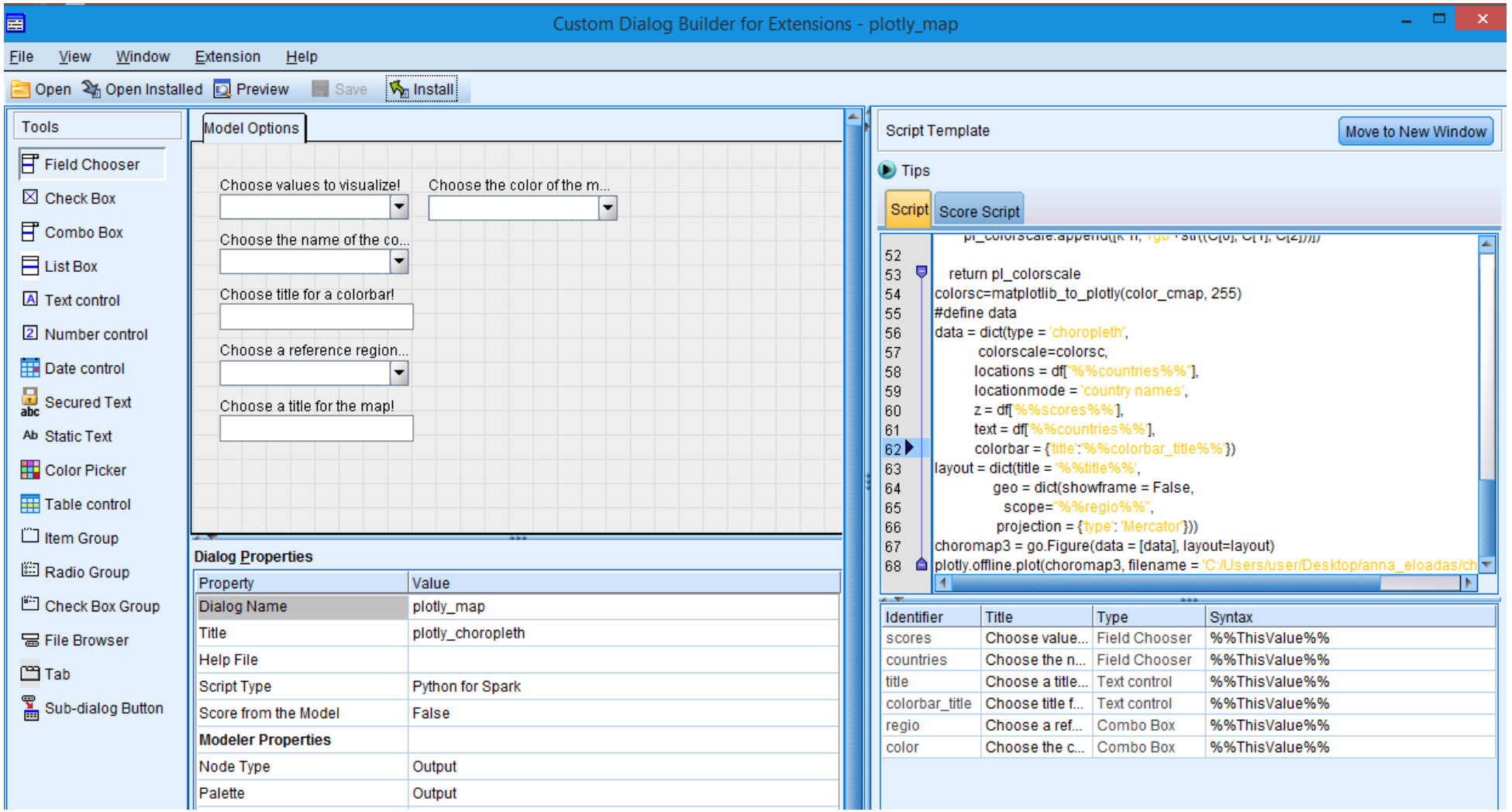
jupyter

In [12]:
```
data = dict(type = 'choropleth',
            colorscale = magma,
            autocolorscale=False,
           locations = df['Country'],
           locationmode = 'country names',
           z = df['Happiness.Score'],
           text = df['Country'],
           colorbar = {'title':'Happiness'})
layout = dict(title = 'Global Happiness',
              geo = dict(showframe = False,
                         projection = {'type': 'Mercator'}))
choromap3 = go.Figure(data = [data], layout=layout)
iplot(choromap3)
```



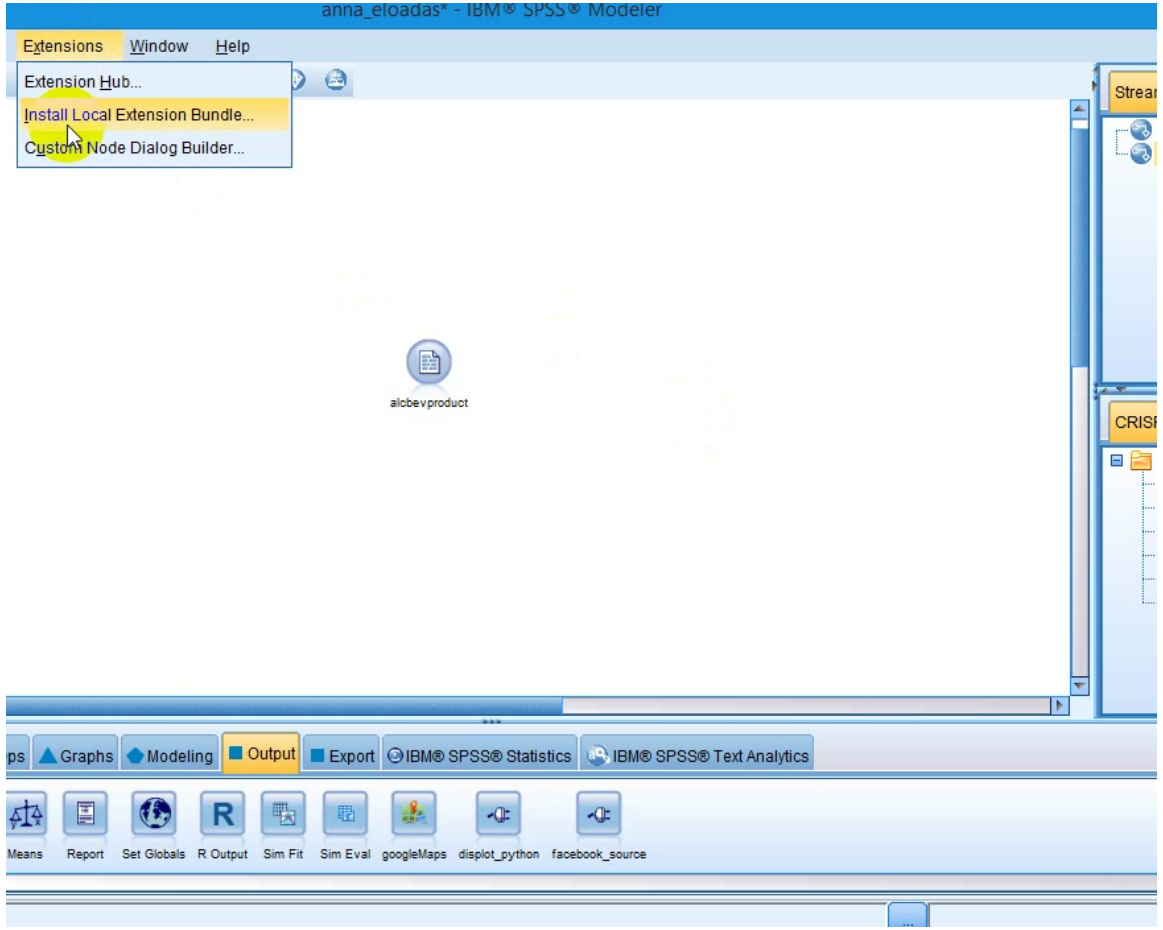
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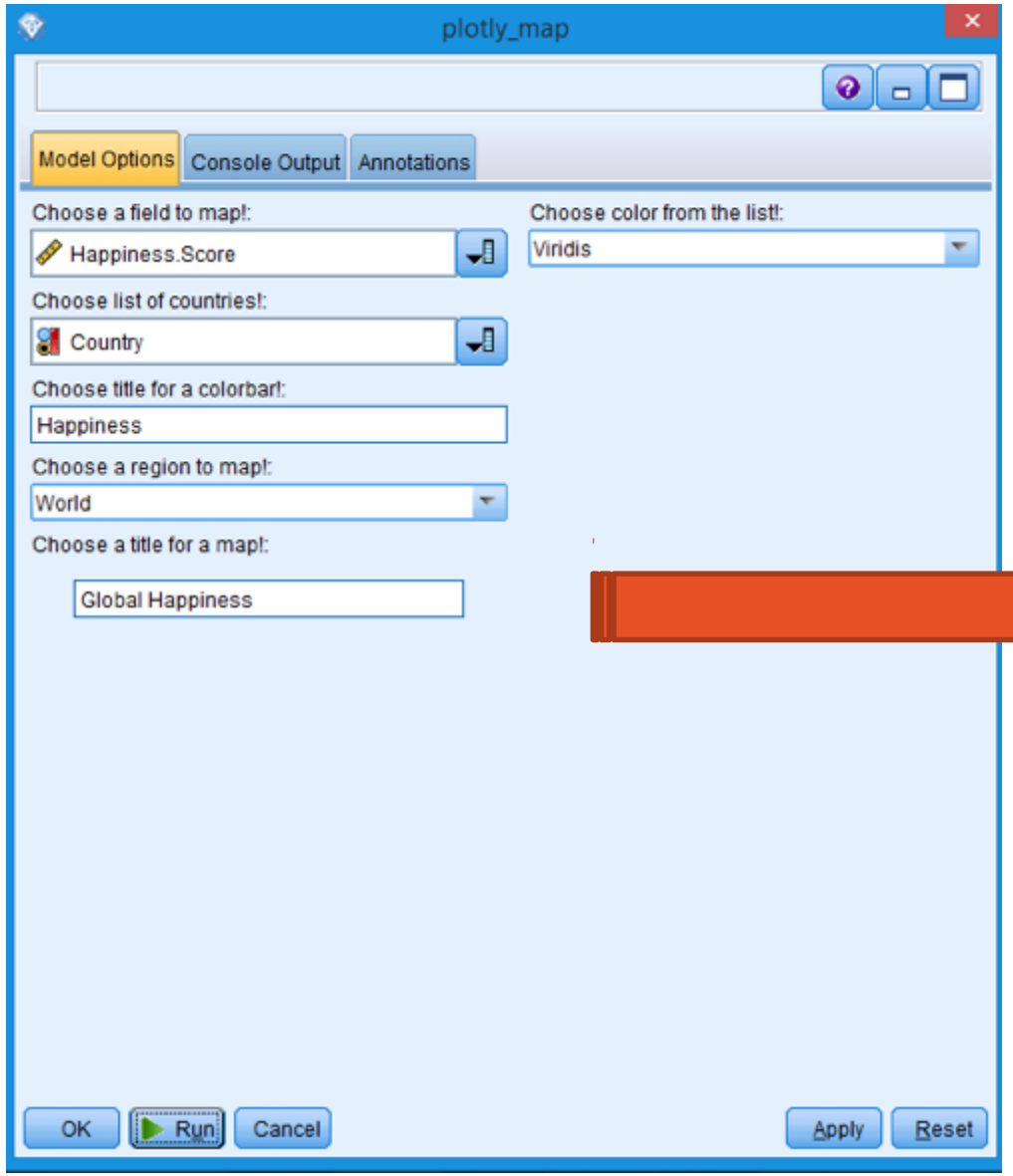
SPSS Modeler

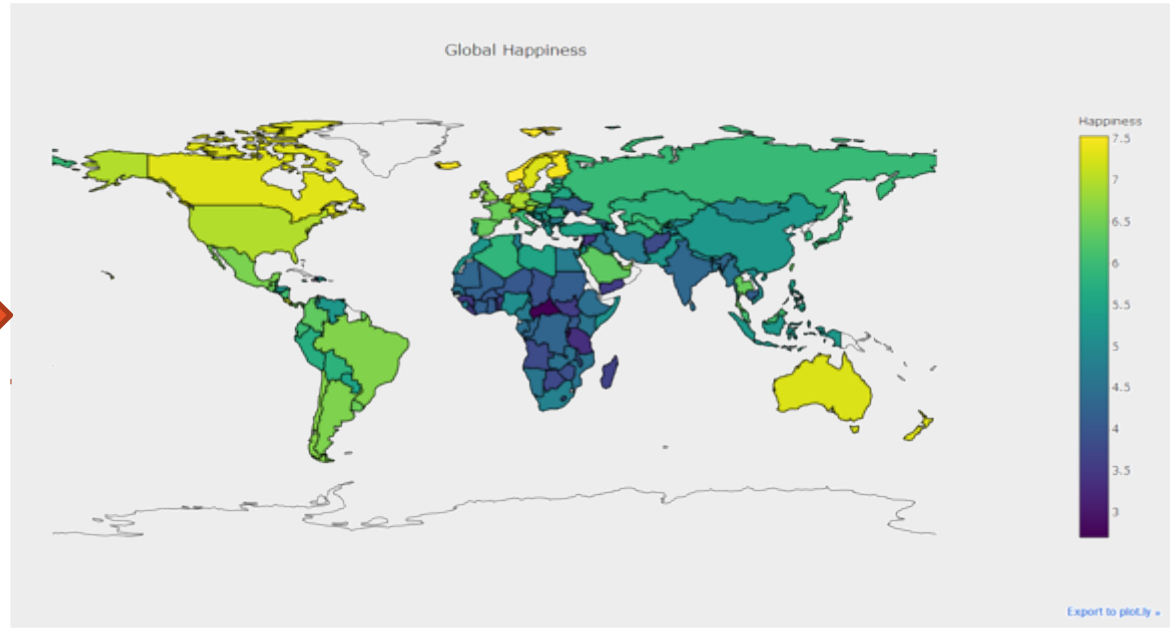


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CUSTOM NODE TELEPÍTÉSE



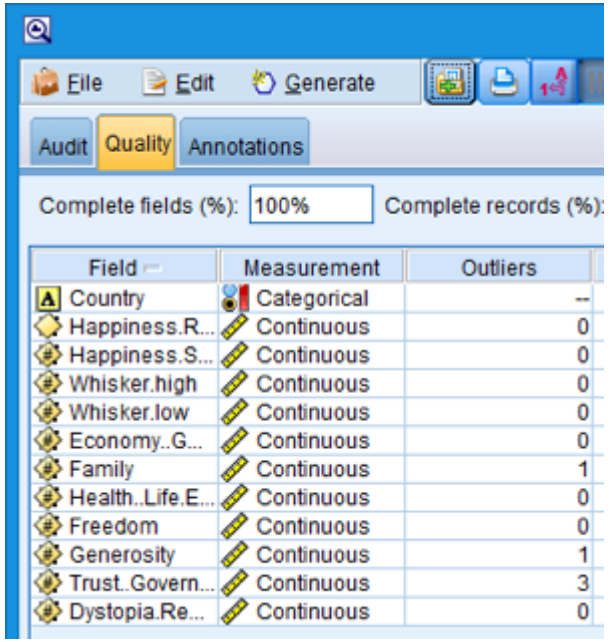

plotly_map
Model Options
Console Output
Annotations
Choose a field to map!:
Happiness.Score
Choose color from the list!:
Viridis
Choose list of countries!:
Country
Choose title for a colorbar!:
Happiness
Choose a region to map!:
World
Choose a title for a map!:
Global Happiness
OK
Run
Cancel
Apply
Reset


Global Happiness
Happiness
7.5
7
6.5
6
5.5
5
4.5
4
3.5
3
Export to plot.ly »

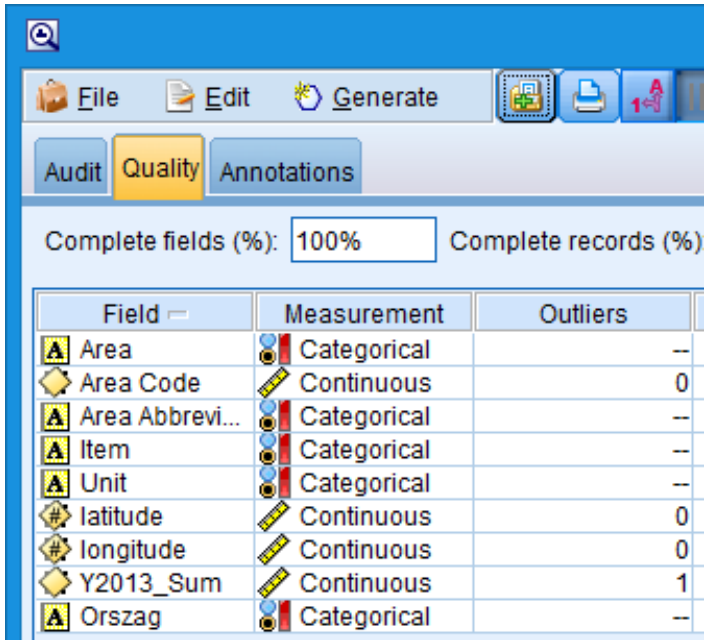
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ALKALMAZÁS MÁS ADATOKRA

Boldogság adatbázis (Gallup 2017)



Európai országok 2013. évi alkoholelőállítása (tonna)

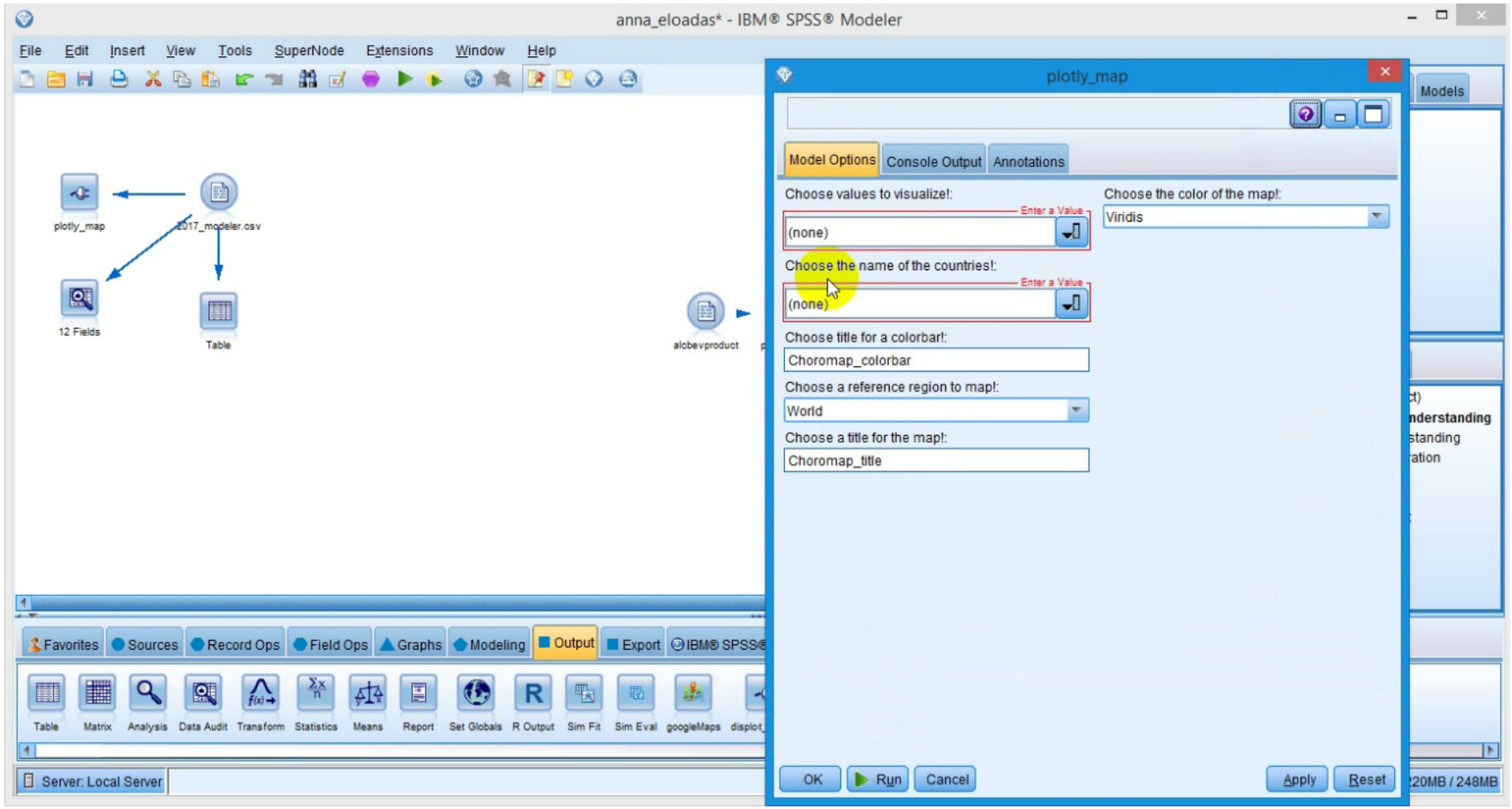


Megoldás SPSS Modeler Custom Node segítségével



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MEGOLDÁS



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ELŐNYÖK

- Felhasználóbarát kivitelezés
- Könnyebb reprodukálhatóság eltérő struktúrájú adatokon
- A Python modulok Modelerbe integrálása komplexebb elemzési lehetőségeket nyit

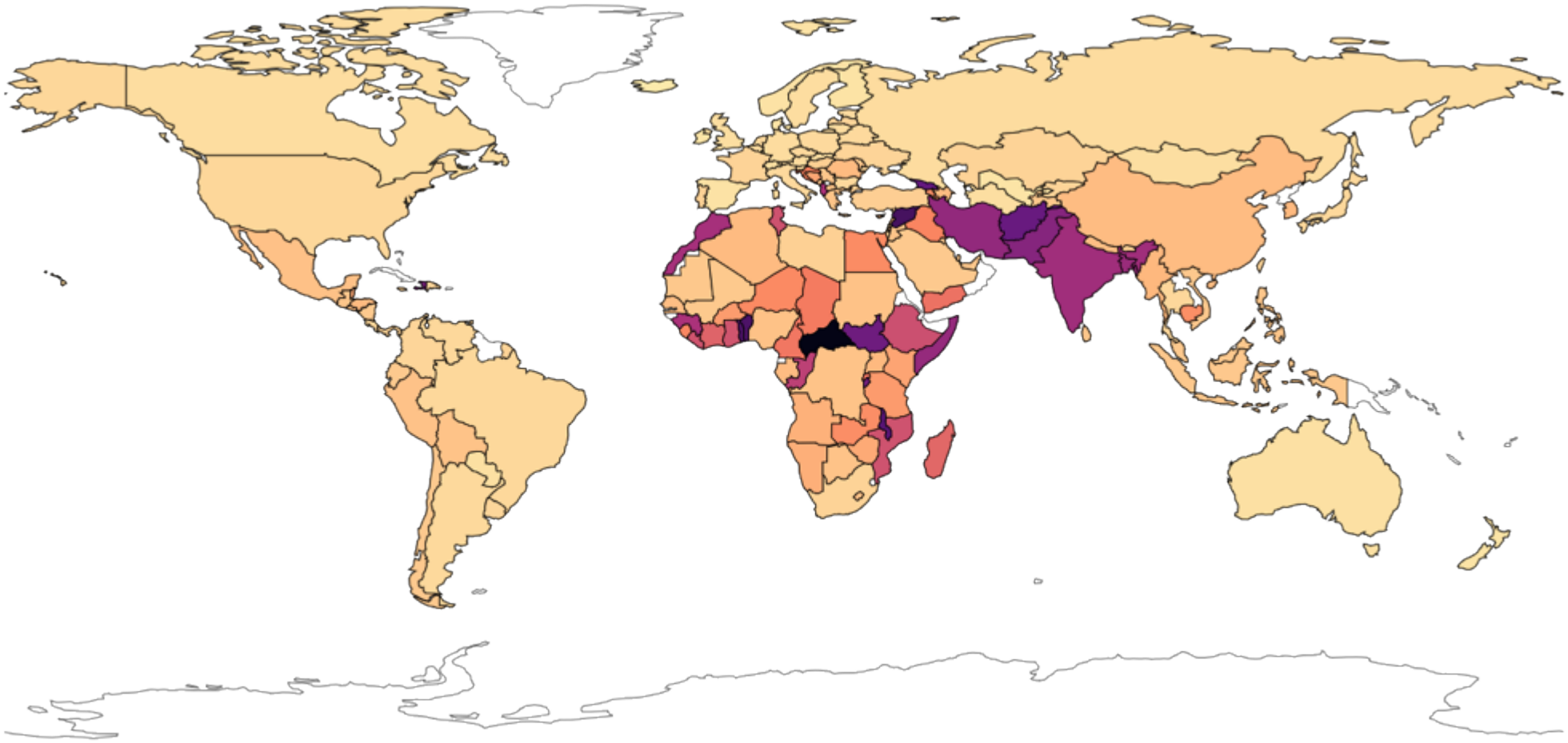


HASZNOS LINKEK

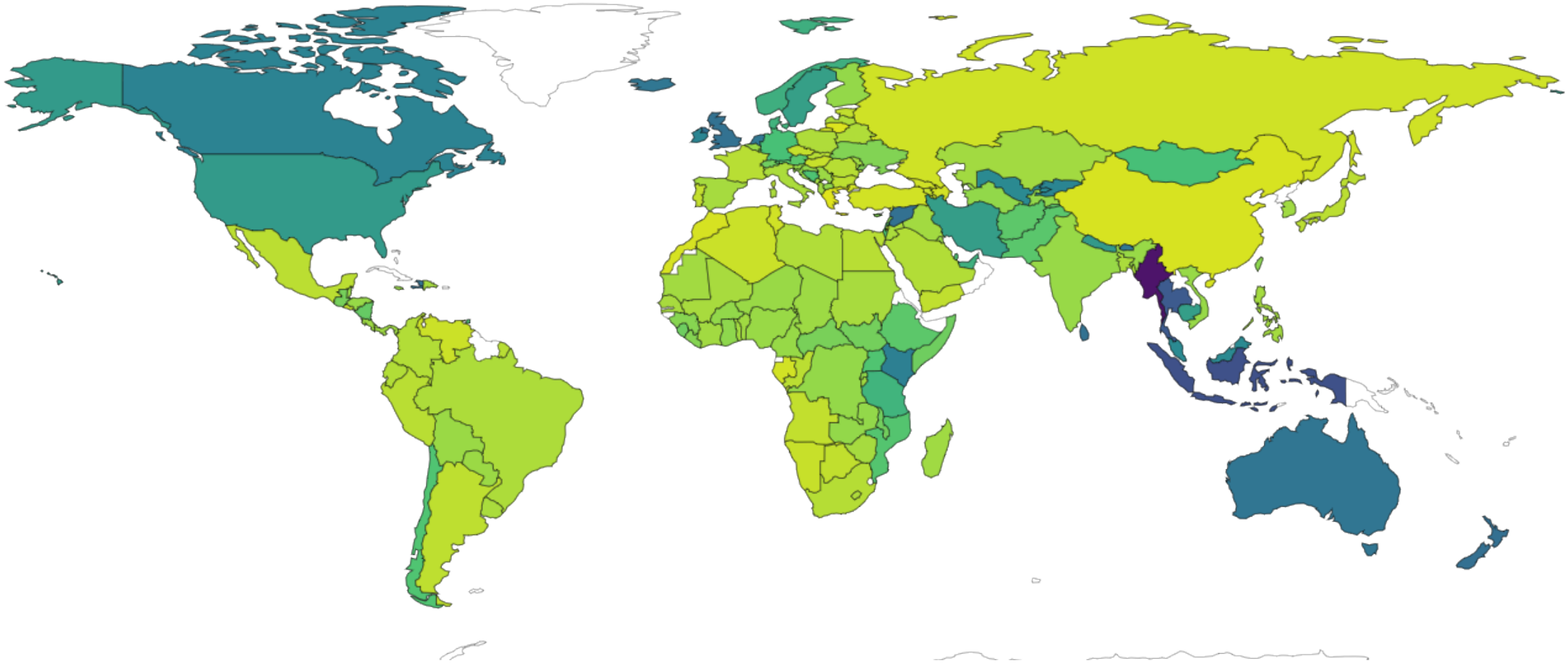
- Python és SPSS Modeler együttműködése – Custom Node Dialog Builder https://www.ibm.com/support/knowledgecenter/en/SS3RA7_sub/modeler_r_nodes_ddita/clementine/r_pyspark_api.html
- Python adatvizualizáció modulok:
  Matplotlib: https://matplotlib.org/
  Plotly: https://plot.ly/python/



CSALÁDI KAPCSOLATOK

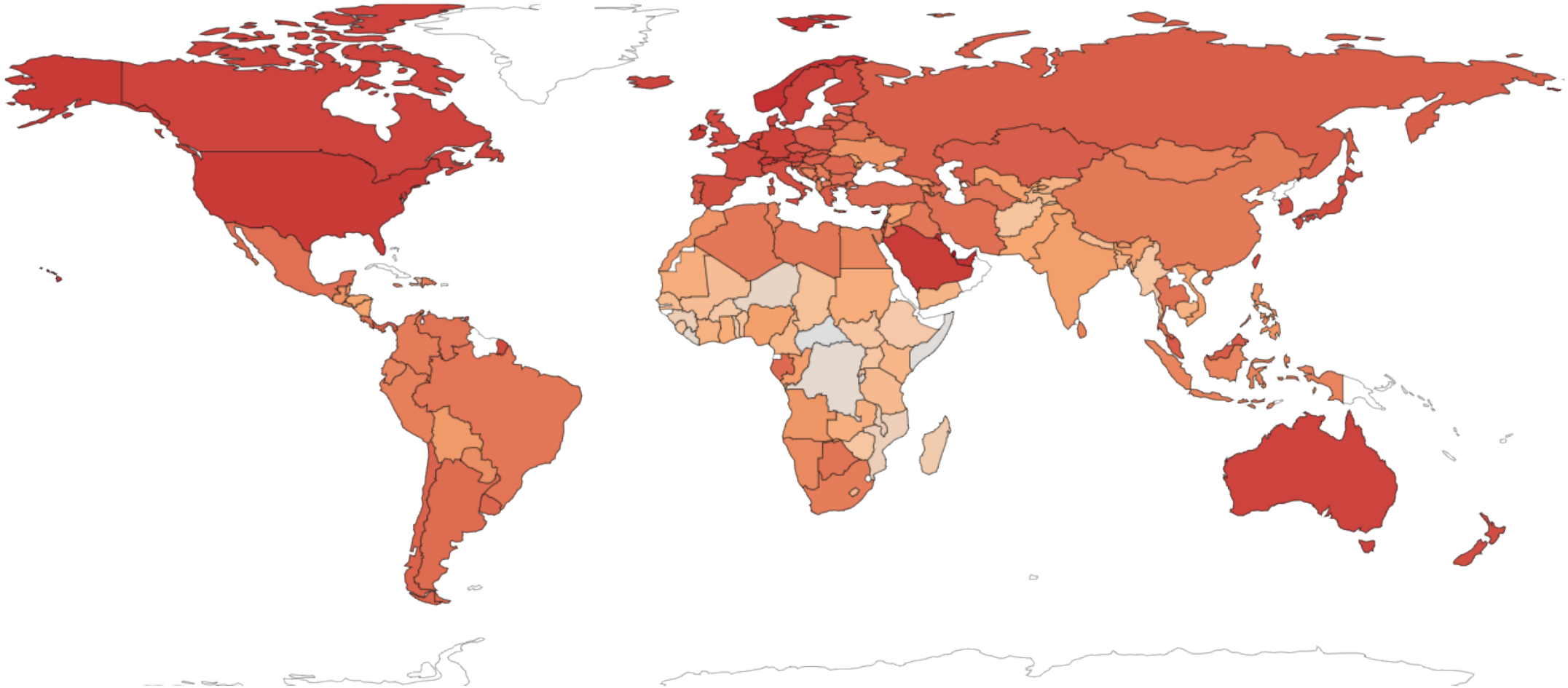


NAGYLELKŰSÉG

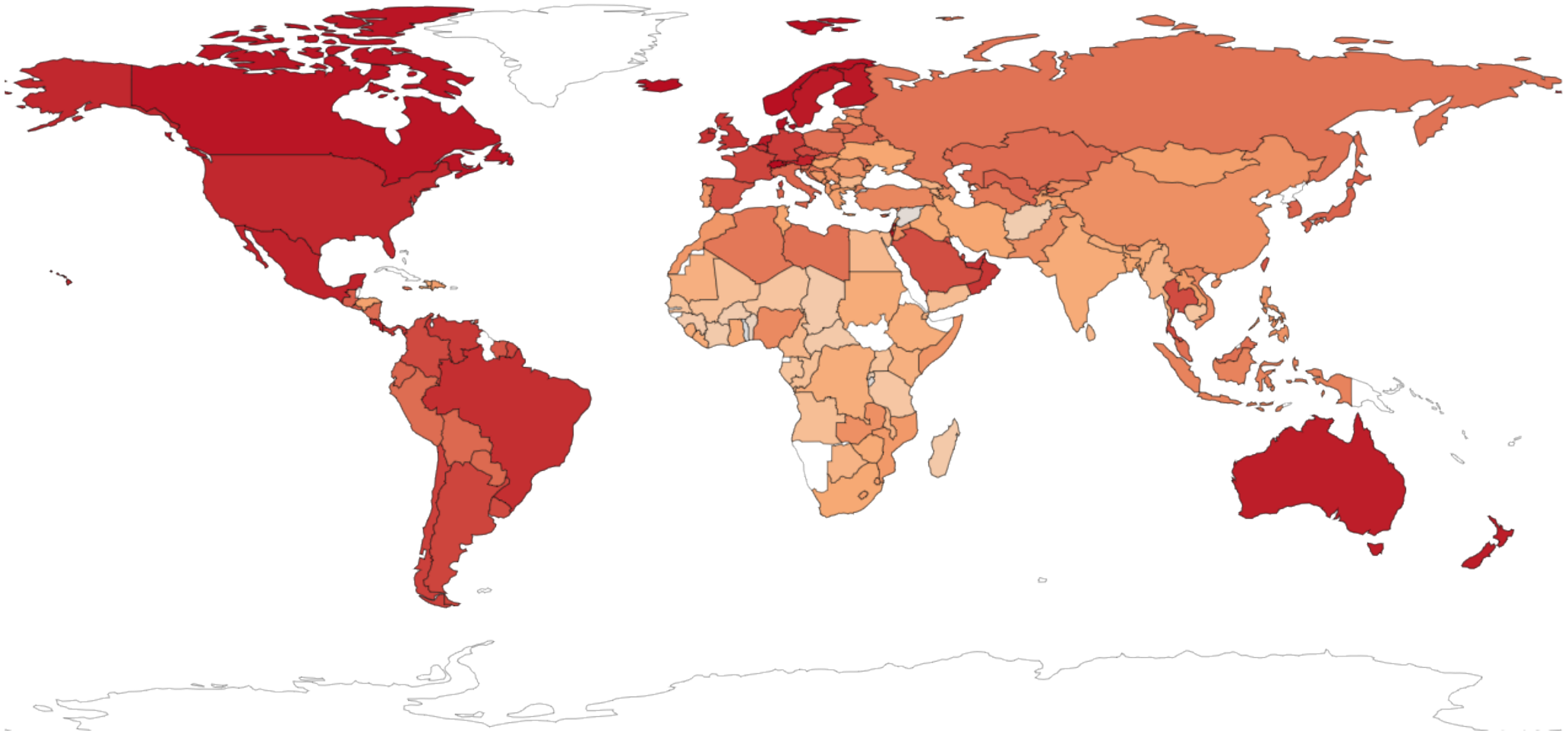


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GDP / FŐ



BOLDOGSÁG





KÖSZÖNJÜK A FIGYELMET!

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