EDA Summative Assessment

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March 2023

Question 1.1

a) *How would you characterise the design (cross-section, repeated cross-section, panel, time-series...) of the "European Values Study"?*

The European Values Study is a repeated cross-sectional survey as a different samples are used between the different time periods: the sample from the first year is different from the next.

b) *Is the source of the data experimental or observational?*

I would argue that the European Values Study as a survery is observational as it does not discriminate between a treatment and control group. Instead observations are made by comparing associations between answers of different respondants, this makes it more difficult to discern a causation.

c) *Life satisfaction and Employment are self-reported variables. What does "self-reported" mean? Explain why self-reported variables might create issues in terms of the accuracy and comparability of the data.*

Self-reported variables ask participants to measure themselves, this can create issues with data validity as participants may not be honest, or their experiences may impact the severity of their response despite having similar circumstances to others.

d) *How would you interpret a value higher than 90 for the variable percentile? Briefly explain why the variable percentile is better suited than the absolute level of income (Monthly household income) to compare individuals at different points of the income distribution and across countries.*

A value higher than 90 means that the absolute value of the variable is in the top 10% of the total sample. In terms of monthly household income, a value of 90 would indicate that they have an individiaul income greater than 90% of the country population's incomes.

e) *The variable Full employment is constructed from the variable Employment with the following formula:*

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=IF(OR(R2="Full time", R2="Unemployed"), IF(R2="Full time",1,0),"")
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Where R is the column for Employment, Explain how the formula works. What is the value returned for an individual who only works part time?

The formula consists of a nested if statement. First it checks whether the variable is "Full time" or "Unemployed", if so, the values 1 and 0 are applied respectively. If the value is neither of the two (as indicated by the OR operator), then the value remains blank "".

Question 1.2

Row Labels	Respondant count	Life sat. Mean	Life sat. StdDev	Work eth. Mean	Work eth. StdDev
Albania	1200	6.471	2.263	3.923	0.610
Armenia	1224	5.705	2.586	3.886	0.636
Austria	1216	7.476	2.100	3.723	0.756
Belarus	1237	6.065	2.078	3.620	0.761
Bosnia Herzegovina	1104	7.084	2.364	3.545	0.657
Bulgaria	1183	5.705	2.737	4.117	0.625
Croatia	1188	7.071	2.359	3.406	0.718
Cyprus	775	7.209	2.194	4.065	0.700
Czech Republic	1308	7.192	2.091	3.633	0.781
Denmark	1061	8.408	1.769	3.537	0.736
Estonia	1273	6.619	2.135	3.550	0.757
Finland	940	7.714	1.794	3.273	0.784
Georgia	1233	5.486	2.464	3.994	0.641
Greece	1246	6.921	2.235	3.817	0.723
Hungary	1248	6.295	2.318	3.852	0.663
Iceland	666	8.072	1.612	2.808	0.683
Ireland	504	7.823	1.658	3.473	0.825
Italy	876	7.398	2.046	3.734	0.712
Kosovo	1339	6.839	2.547	4.073	0.654
Latvia	1197	6.347	2.082	3.498	0.615
Lithuania	1143	6.303	2.258	3.557	0.590
Luxembourg	1165	7.833	2.063	3.683	0.835
Macedonia	1290	6.933	2.400	3.846	0.750
Malta	730	7.685	2.142	3.541	0.649
Moldova	1174	6.563	2.532	3.898	0.596
Montenegro	1166	7.581	2.322	3.708	0.773
Netherlands	1250	7.990	1.213	3.148	0.753
Northern Cyprus	404	6.386	2.501	3.879	0.542
Northern Ireland	309	7.819	1.579	3.313	0.681
Norway	992	8.104	1.679	3.580	0.768
Poland	1050	7.216	1.962	3.496	0.638
Portugal	764	6.372	2.024	3.898	0.616
Romania	1025	6.899	2.473	3.871	0.682
Russian Federation	1102	6.524	2.432	3.621	0.763
Serbia	1216	6.932	2.404	3.665	0.702
Slovakia	1042	7.055	2.182	3.833	0.761
Slovenia	801	7.623	1.988	3.682	0.654
Sweden	788	7.679	2.074	3.247	0.773
Switzerland	934	7.968	1.773	3.450	0.690
Ukraine	1178	6.010	2.446	3.737	0.748
Grand Total	**41541**	**6.965**	**2.318**	**3.674**	**0.748**

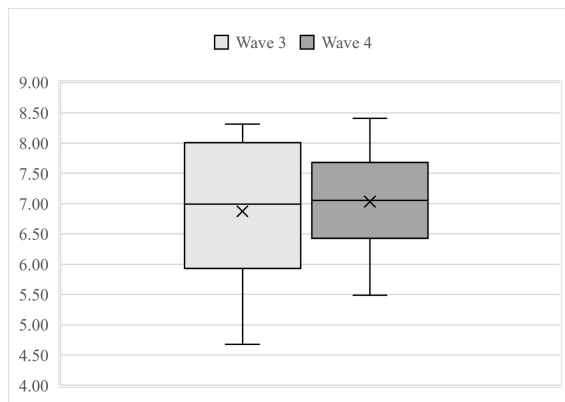Table 1: Shows averages and standard deviation for Life Satisfaction and Work Ethic by country for wave 4.

As shown in Table 1 there are 39 countries that are represented in wave 4. Furthermore, there are a total of 41541 respondents for wave 4.

There is a higher average life satisfaction in Iceland (8.072) than in Italy (7.398) and a smaller standard deviation, 1.612 compared to 2.046. Since both the average responses is greater, and there is less deviation between responses, it could be argued that individuals are generally
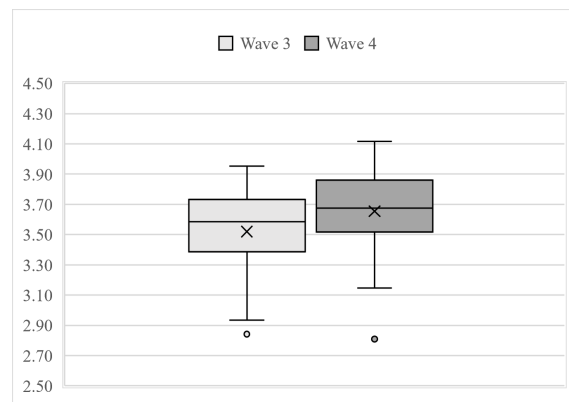
happier in Iceland compared to Italy. Furthermore, life satisfaction itself is not a measurement of happiness (Badri et al. 2022). It is possible that a person is satisfied with their life, for example, satisfied with their life achievements, families, relationships, etc. but not happy as of itself.

Since Iceland had a lesser average response to the work ethic question, 2.808 compared to 3.734, it could be argued that unemployed individuals in Italy are more likely to be stigmatised for not working than in Iceland since the society values work more.

Question 1.3

(a) Life Satisfaction

(b) Work Ethic

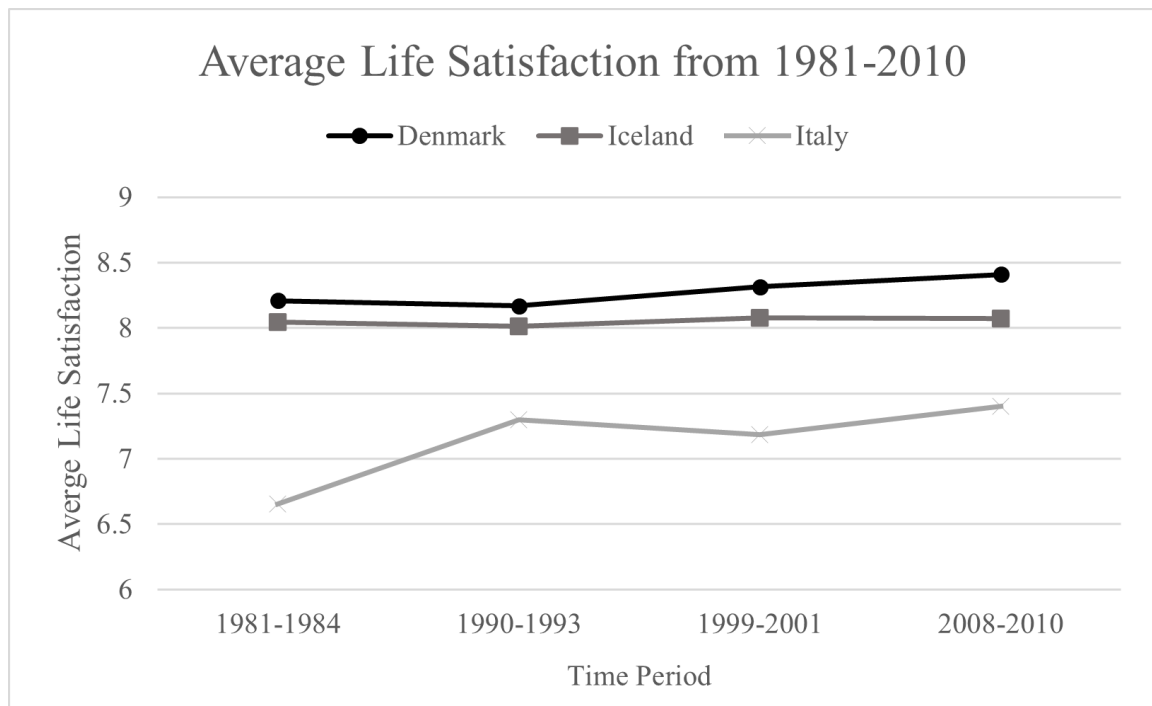Figure 1: Avera

Question 1.4

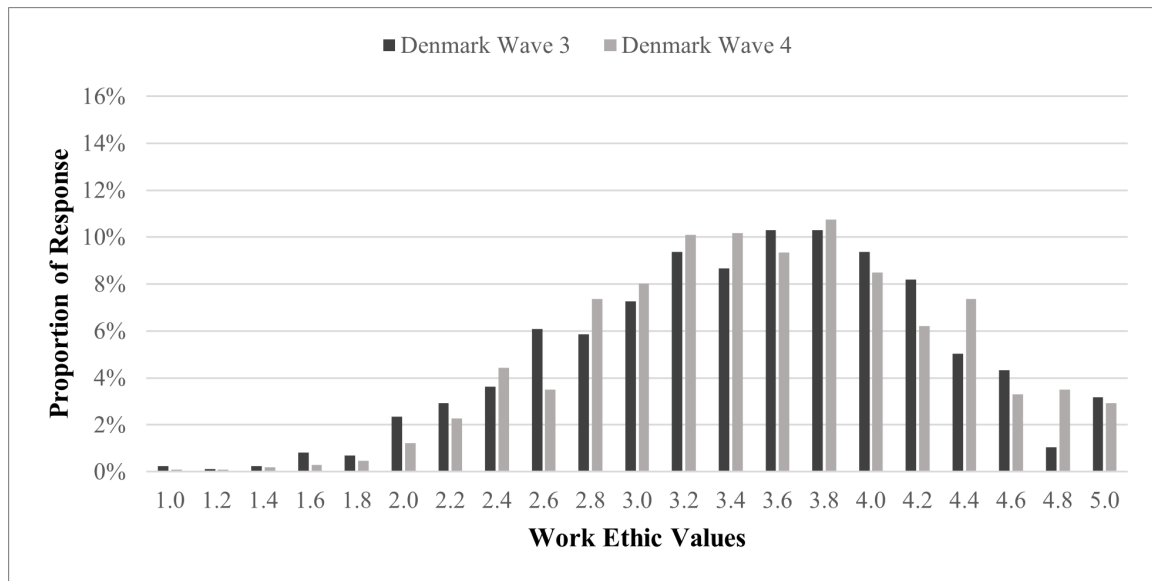Figure 2

Question 1.5

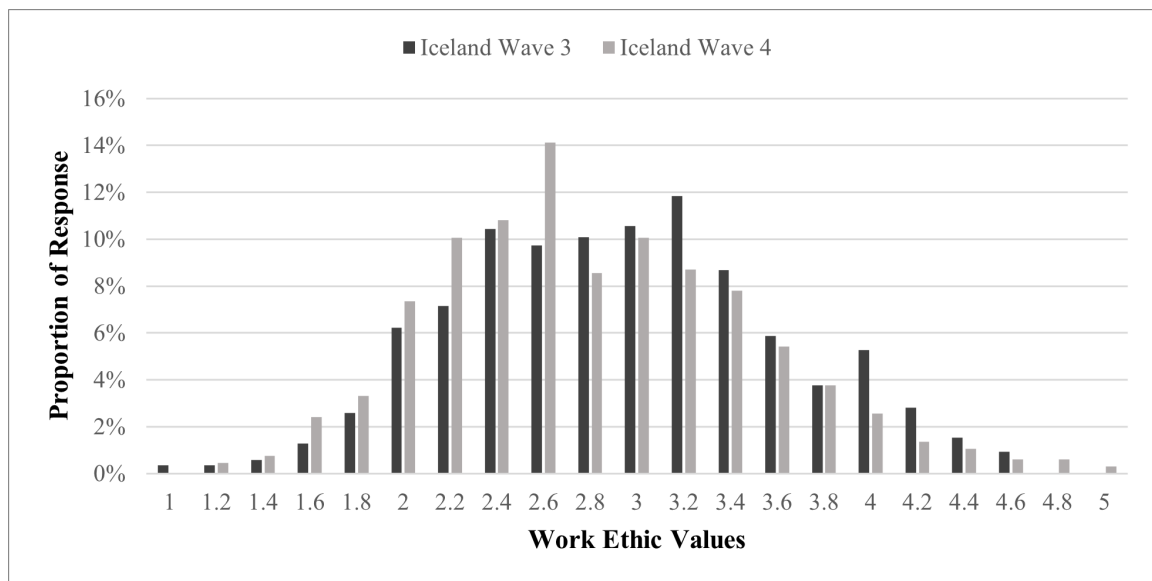Figure 3: Distribution of Work Ethic responses for Denmark wave 3

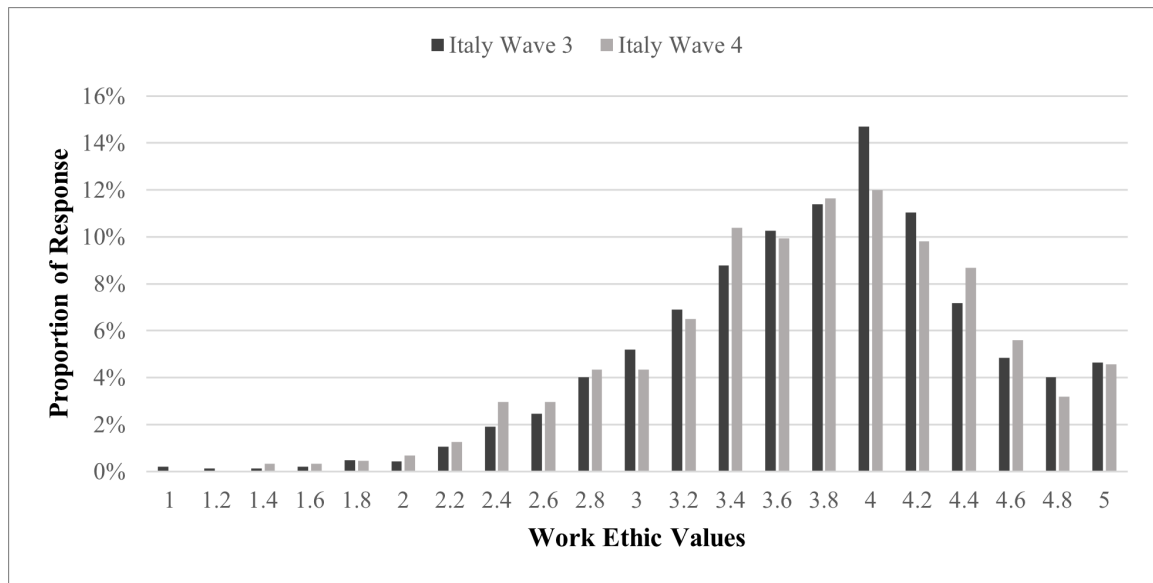Figure 4: Distribution of Work Ethic responses for Iceland wave 3

Figure 5: Distribution of Work Ethic responses for Italy wave 3

Question 1.6

References

Badri, M. A., Alkhaili, M., Aldhaheri, H., Yang, G., Albahar, M. & Alrashdi, A. (2022), 'Exploring the reciprocal relationships between happiness and life satisfact on of working adults—evidence from abu dhabi', *International Journal of Environmental Research and Public Health* **19**(6), 3575.