Introduction to Statistics
homework 4

Johan A. Elkink

jos.elkink@ucd.ie

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Note that this is *not* the homework assignment for students registered to POL50070 Quantitative Methods I.

You will submit one file which includes all commands, output, and interpretation, using RMarkdown. Knit the RMarkdown file to HTML, open in a browser, and then print to a PDF file, which you can then submit. The filename of the file must look exactly like this: `hw4_POL40950_00000000.pdf`*, where you replace 00000000 with your UCD student number. Send this file to* `jos.elkink@ucd.ie`*.*

For any plots and tables, ensure that axes and variables are properly labelled. Typically, you do not want to use variable names, but more descriptive labels.

Percentages with a asterisk indicates that positive rather than negative marking will be applied.

Questions

1. Revise any statistical analyses from Homework 3 as you see fit, including potentially additional visualisation of the underlying data and the results.

2. Write an essay with the following structure, where you can use your answer from Homework 3 as the draft version to improve:

   (a) Introduction, motivating and outlining the analysis that will be presented. Include the main research question. (approximately 500 words)

   (b) Theory section, outlining the main argument, and referencing the academic literature that either supports the main argument, that has empirically investigated the main argument and/or that contradicts the main argument. Conclude the discussion of literature the supports the argument with a formulation of the main hypothesis to be tested. (approximately 1,000 words)

   (c) Methodology section, describing the ESS data, outlining the selection of variables, the measurement of key variables, and arguing the case for using linear regression.

(approximately 600 words)

(d) Results section, presenting the graph and regression table and providing a full description of results. (approximately 1,000 words excluding the table)

(e) Concluding section, referring back to the introduction, what do we conclude? (approximately 400 words)

References

Grade conversion scheme

UCD	MDP	UCD	MDP
A+	A+	C	C
A	A	D+	C
A-	A	D	C
B+	B+	D-	C
B	B	E+	D
B-	B	E	D
C+	C+	E-	D
C	C	F	F