

Extra credit

Statistics is Everywhere

Throughout the term, we will include a recurring “statistics is everywhere” segment, demonstrating the relevance of statistics to the world around us. One of the skills we hope you will develop is an ability to think critically about the quality of statistical information and about how it is presented in popular (non-scientific) media. One of our goals for this course is to equip you to be more discerning consumers of statistical information. For this extra credit assignment, we are asking you to provide your own “statistics is everywhere” example and evaluate the quality of the example.

Guidelines

Find an article in the popular press (more traditional print or online) which discusses some statistical information and which also has cited source material that is publically available. For example this could be a newspaper article or blog post covering a scientific study for which the paper is published. The original material should include a type of statistic/method that we have covered in class. This should be something recent (published within the last 3 years)

Provide a copy of the source material for both the original material and the popular press article.

In 2 to 3 sentences, briefly summarize the source data: what is the problem/question being addressed? How were the data collected? How was the analysis handled?

In 2-3 sentences, identify what relevant statistical method/concept that we have discussed in the course was used in the original study, and your assessment of whether this was appropriate.

In 2-3 sentences, give your assessment of the overall quality of the data or analysis. (For example; are there issues with the way the data were collected? Is there any reason to suspect the data or analysis are biased? Was the type of analysis appropriate?)

In 3-4 sentences, describe how the original data/analyses were presented in the popular press (tone/detail etc). For example: Was the reporting in keeping with the data (Does the example make extreme claims not supported by the data?), Is enough information presented about the limitations? Is there anything about how the data were presented in writing or graphically that was misleading?)

Your Extra Credit assignment will be worth up to 2 points added to your overall grade for the course.

Constraints

You must cite at least one newspaper article, magazine article, or blog post. You must cite at least one original data source.

You may not use an example we have already discussed in class.

You may not work with anyone else on this assignment.

You can only complete one extra credit assignment during the semester. The last day to submit this assignment is April 17th, however you may submit at any time in the semester prior to that date.

- Note: We expect articles, data sets, and functions to be chosen independently. If there is evidence that students are submitting the same things we will ask you to change your project. To avoid this, decide your idea independently so that your independent thought shines through.