edX   **MITx: 14.310x Data Analysis for Social Scientists**

Help

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Long Question 1 - Jail Sentences and Recidivism

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You are interested in doing a project on jail sentences and recidivism. You find a website listing plea deals and court decisions resulting in jail sentences for Middlesex County, Massachusetts. The list contains name of offender, offense, sex, age, prison of incarceration, and hometown. You scrape the data and perform some preliminary analysis. You then contact the prisoners and ask each to participate in a survey. You survey those who are willing and analyze the resulting data.

Question 6

1/1 point (graded)

You must obtain approval from your IRB before _____.

- ⚪ a. You scrape the data.

- ⚪ b. You do any preliminary analysis.

- ⦿ c. You contact the prisoners. ✔

- ⚪ d. You administer your survey.

Explanation

You should obtain approval from your IRB prior to contacting the prisoners and asking them to participate in the survey, as this would meet the criterion of "data obtained through intervention or interaction with the individual."

Submit   You have used 1 of 1 attempt

✔ Correct (1/1 point)

Question 7

1.0/1.0 point (graded)

Suppose you conclude, later in continuing research, that recidivism (whether released prisoners commit additional crimes) is a function of length of original sentence, S, distance of prison from hometown, D, and sex of offender, M ($= 1$ if male). In particular, the probability of recidivism, $P(R)$, is $S/32 + D/40 + 0.1M$. Suppose also that S follows a $\mathcal{U}(1, 15)$ distribution, D follows a $\mathcal{E}(0.05)$, and 80% of offenders are male.

What is the expected recidivism rate?

Please express your answer to the nearest whole percentage, i.e if your answer is 23.2, please enter 23 and DO NOT enter in a $\%$ sign

83   ✔ **Answer:** 83

Models

▸ Module 10: Practical Issues in Running Regressions, and Omitted Variable Bias

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▸ Exit Survey

▾ **Final Exam**

Final Exam
Final Exam due Dec 19, 2016
05:00 IST   ✎

$$\boxed{83}$$

Explanation

$$[R] = \left[\frac{S}{32} + \frac{D}{40} + 0.1M\right] = \frac{[S]}{32} + \frac{[D]}{40} + 0.1[M] \quad [S] = \frac{1+15}{2} = 8, \quad [D] = \frac{1}{0.05} = 20, \text{ and}$$

$$[M] = 0.8. \text{ So, } [R] = \frac{8}{32} + \frac{20}{40} + 0.1 * 0.8 = \frac{83}{100} \text{ The recidivism rate is thus } \mathbf{83\%.}$$

| Submit | You have used 1 of 1 attempt |