



PSYC 60: INTRO TO STATISTICS

Prof. Judith Fan

Spring 2021

LAST TIME

MINI-REVIEW SESSION #3



Using an explanatory variable to model variation in an outcome variable

Quantifying effects using confidence intervals

Putting all the pieces together: statistical modeling

QUIZ 4

Ⓜ Average Score

70%

Ⓢ High Score

100%

Ⓣ Low Score

20%

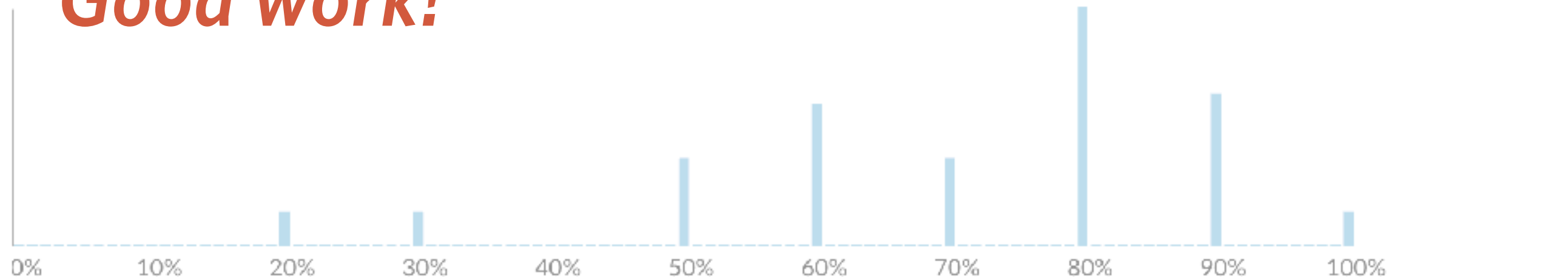
Ⓢ Standard Deviation

1.92

⌚ Average Time

18:45

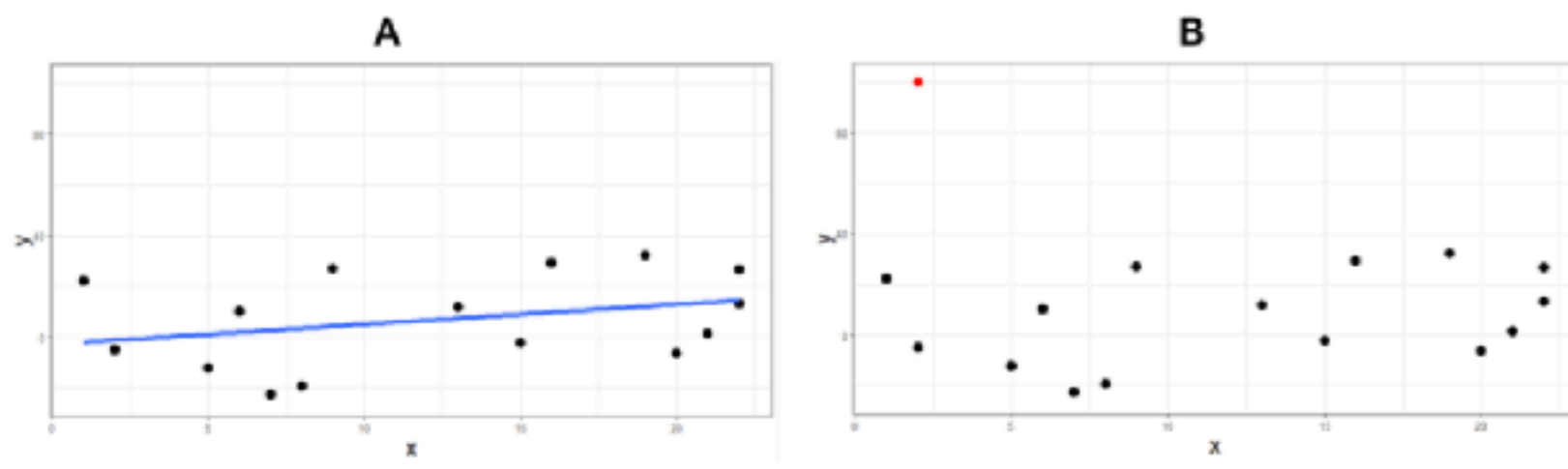
Good work!



Please review the questions you missed & post your questions to Slack and/or come talk to us about them in office hours.

QUIZ 4: REVIEW

The two plots A and B show two scatter plots. In plot A a regression line is plotted over the data -- the slope of the regression line is positive. In plot B, an additional data point has been added (shown in red). With the addition of this point, the slope of a regression line in plot B would be _____ the slope in plot A.



smaller than	40 respondents	54 %	<div></div> ✓
greater than	17 respondents	23 %	<div></div>
equal to	17 respondents	23 %	<div></div>

The best-fit line will still try to minimize the squared error (vertical distance) from the red point, making it tilt further down to the right than it would otherwise.

QUIZ 4: REVIEW






If we run the following line of R code

```
favstats(FatMice18$WgtGain4)
```

we get the following output

min	Q1	median	Q3	max	mean	sd	n	missing
3	6	8.5	10	17	8.4	3.3	18	0

Which of the following numbers is closest to the Sum of Squared Deviations (from the mean) for the WgtGain4 values of the FatMice18 dataset?

324	3 respondents	4 %	
10.9	25 respondents	34 %	
3.3	14 respondents	19 %	
185	15 respondents	20 %	 ✓
196	17 respondents	23 %	

Recall that:

$$Var = SSE / df$$

$$sd = \sqrt{Var}$$

$$Var = sd^2$$

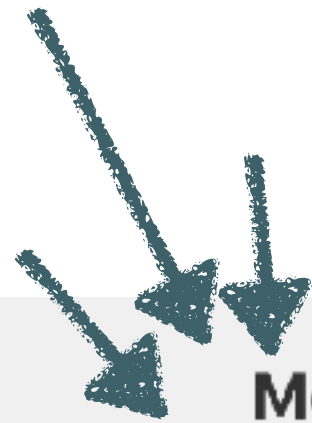
$$Var = 3.3^2 = 10.9$$

$$SSE = Var * df$$

$$SSE = 10.9 * (n-1)$$

$$SSE = 10.9 * 17 = 185$$

DUE THIS WEEK



9	May 24	Model comparison <u>Before:</u> Chapter 11 <u>During:</u> Lab 5A	Null hypothesis significance testing <u>Before:</u> None <u>During:</u> Lab 5B	Practice Quiz 5	Lab 4 Due
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Chapter 11 was officially due at 1pm PT today.

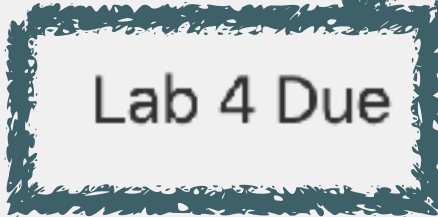
Note: We will be instituting class-wide no-penalty extensions for ALL CourseKata modules. That means that so long as you complete any missing modules by ****Friday 11:59PM on June 4****, you will receive full credit. (However, no extensions granted beyond that!)

DUE THIS WEEK

		Model comparison	Null hypothesis significance testing
9	May 24	<u>Before:</u> Chapter 11 <u>During:</u> Lab 5A	<u>Before:</u> None <u>During:</u> Lab 5B
			Practice Quiz 5
			Lab 4 Due

Released Thursday at
5PM & due by 4:59PM
on Friday

DUE THIS WEEK

9	May 24	Model comparison <u>Before:</u> Chapter 11 <u>During:</u> Lab 5A	Null hypothesis significance testing <u>Before:</u> None <u>During:</u> Lab 5B	Practice Quiz 5	 Lab 4 Due
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Lab 4 must be submitted via DataHub by 11:59pm PT on Friday, May 28. Feel free to submit early!

IN SECTION THIS WEEK

- **This week: Begin working toward Milestone 5 (Final Report, due 6/4).** This report synthesizes all of the work you have done throughout the quarter on your final project and will be graded. Only one submission per group is required.
- **This week: We will also be releasing templates you can use for Project Milestone 6 (Project Poster, due 6/9).** This poster will provide the backdrop to your group's 5-minute presentation at the Final Project Showcase on Thursday, June 10.

CAPEs OPEN THIS WEEK!

CAPE

to date with county and state guidelines as well as CDC recommendations.



General Questions

Overall Progress

1/3

You Are CAPEing

SAMP 100 - Sample Course

Instructor Sample Instructor

Term W121

CAPE Sections

General Questions

Course Questions*

Sample Instructor Questions*

* contains required question(s)

Your reason for taking this class is

Major

Minor

Gen. Ed.

Elective

Interest

What grade do you expect in this class?

A

B

C

D

F

P

NP

I learned a great deal from this course.

Strongly Disagree

Disagree

Neither Agree nor Disagree

Agree

Strongly Agree

Not Applicable

How many hours a week do you spend studying outside of class on average?

0-1

2-3

4-5

6-7

8-9

10-11

12-13

14-15

16-17

18-19

20 or more

CAPEs OPEN THIS WEEK!

- **CAPEs (Course and Professor Evaluations) open today Monday, May 24!** Please do take the time to fill one out for PSYC 60!
- **This is your chance to share your honest feedback about your learning experience in this course and help me make this course better.** I read and take your comments seriously, and it means a lot to me to get an accurate picture of what you've gotten out of this course, so I know what I can do in the future to better support future students in this class.
- **On my end, I've been impressed by your courage & persistence throughout this quarter, in a very difficult year.** I admire your willingness to embrace these intellectual challenges and also support one another with patience and compassion.

Also \$\$ FOR IA EVALUATIONS!



Evaluation System

Raffle Prizes

As an incentive for students to submit evaluations of their Instructional Assistants, several prizes are being offered this quarter:

- Five (5) \$100 Triton Cash cards

Fall 2020 Raffle Winners

The following students were randomly selected to receive the following prizes, and will be contacted with information on how they may claim their prizes. If your name evaluates your Instructional Assistant next quarter and you may be one of the lucky winners!

\$100 Triton Cash cards

- LOPEZ, LESLEY
- NELSON, GARRETT THOMAS
- LIM, DAVID HUI
- CYRIL AROKIA RAJ, CHRIS MATTHEW
- SUSUKI, KRISTEN KIMI

Terms and Rules

- Prizes are only offered for student Instructional Assistant evaluations. The prizes are not offered for graduate course evaluations or instructor IA evaluations. This is for students affiliated with CAPE.
- One entry is automatically entered for each valid Instructional Assistant evaluation submitted. Blank evaluations are not considered valid. The contents of evaluations have no bearing on the submitter's likelihood of winning.
- To maintain the anonymity of those who have submitted evaluations, prize entries are stored separately from evaluations.
- Entrants may only win one item per quarter.
- Prize winners will be randomly selected within 24 hours after the end of the evaluation period. The names are drawn from all entries.
- Once the names are selected, the winners will be contacted via UCSD email about their prize. The winners will be given instructions on how to pick up their prize.
- The names of prize winners may be published on the Academic Affairs Evaluations system and in future notifications.
- Prize winners may not exchange their prizes for other prizes, or for the cash value of their prizes.

TODAY

LAB 5A: MODEL COMPARISON



*General
announcements*

*Break out
into
lab groups*

*Return to main
room and
debrief*

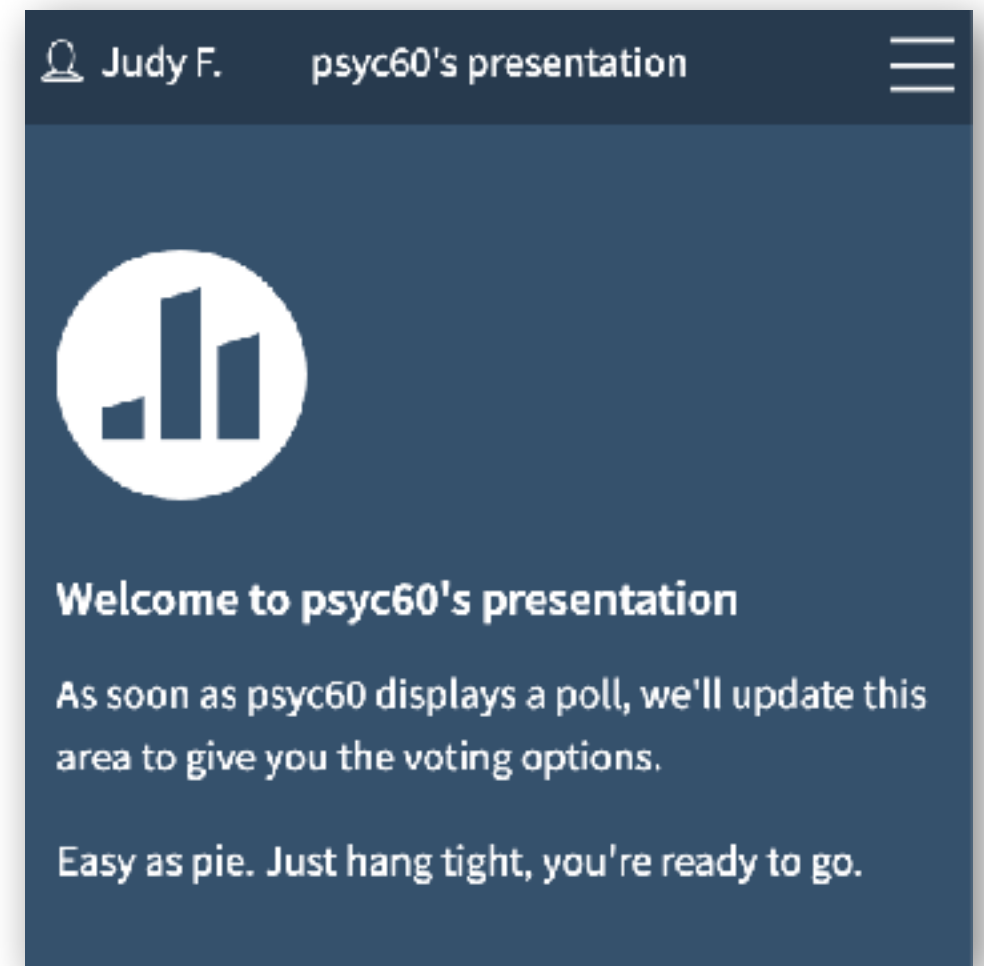
Want real-time help?
(1) Post to #lab-assignments,
mention both your TA & Room
(2) "Asking for help" in Zoom
(#2 is a bit less reliable!)

Everyone come back at
2:10pm PT

DEBRIEF

1. Open any web browser & type in this URL:
PollEv.com/psyc60
2. Make sure to log in to your account using your UCSD email & name as it appears in Canvas.

You should see something like this



PSYC 60: Lab 5A | General Impressions

When survey is active, respond at pollev.com/psyc60

0 done

 **0 underway**