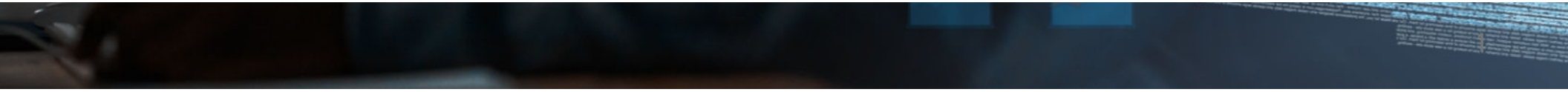
Psyc 60: Intro to Statistics

Prof. Judith Fan

Spring 2021



Today

Lab 2c: Interpreting and Visualizing data

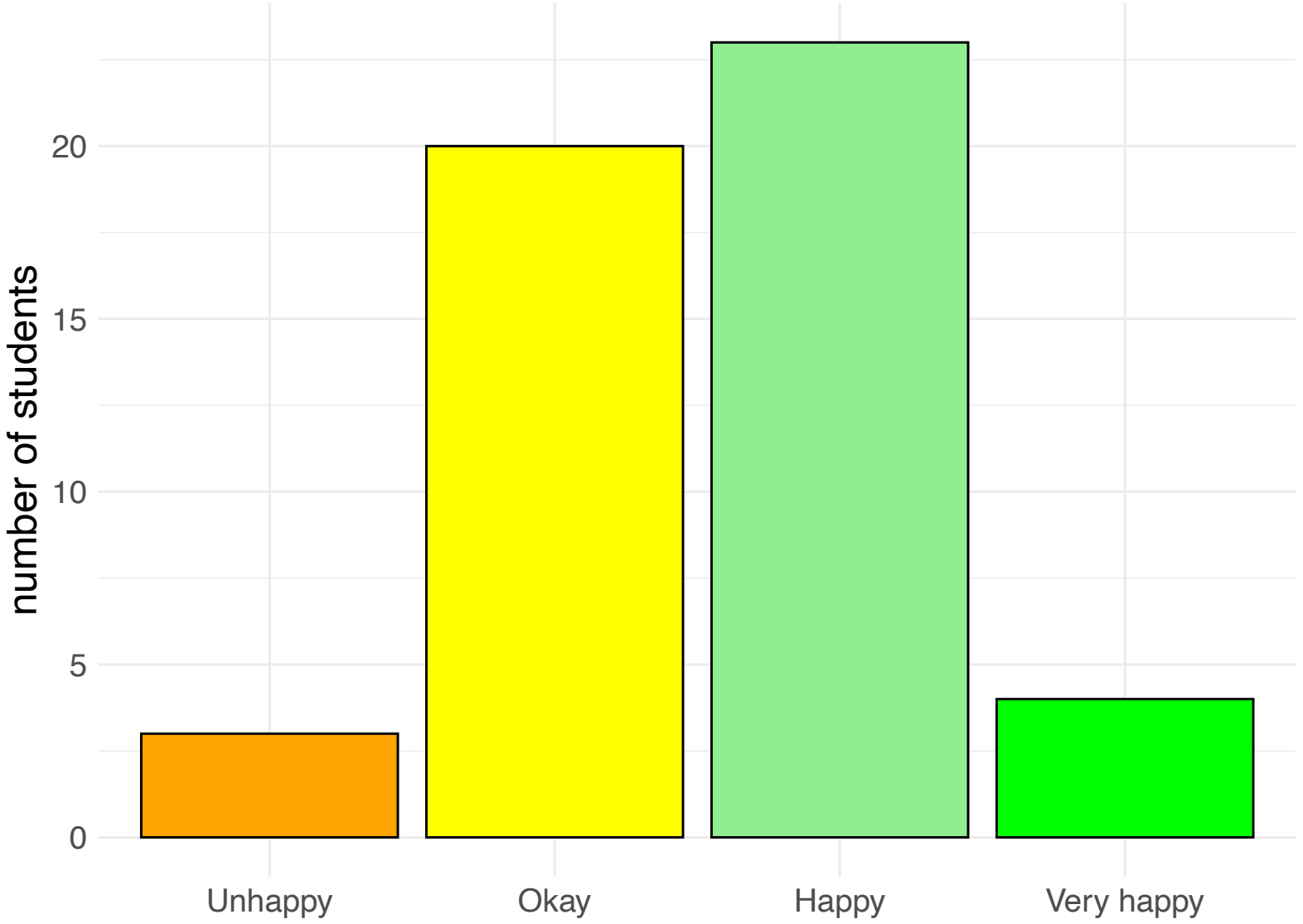
General announcements & recap

Break out into lab groups

Return to main room and debrief

Last Time

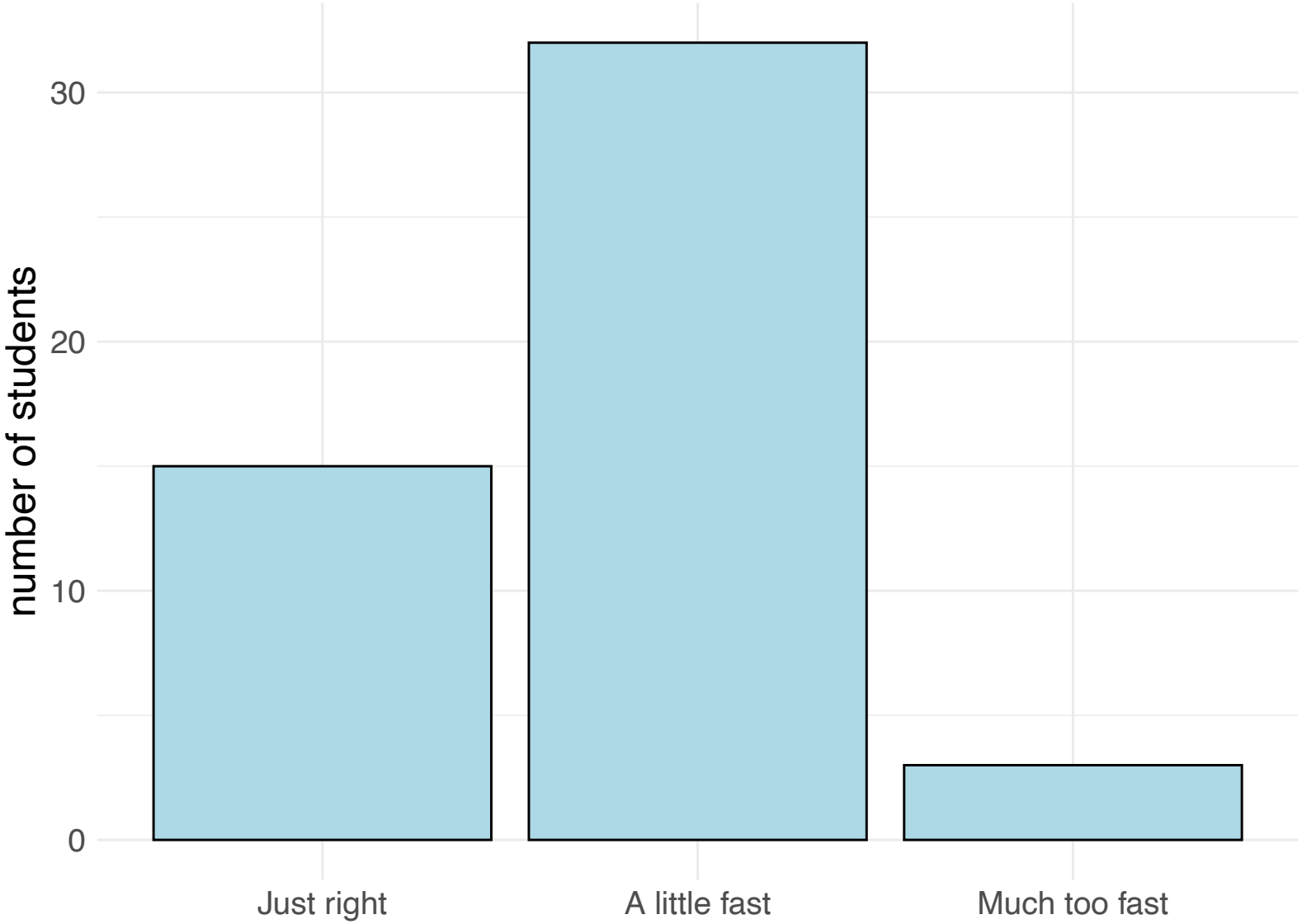
"How happy are you with the class so far?"



N = 50 responses

Last Time

How happy are you with the pace of this class so far?



N = 50 responses

Last Time

What is something new you learned today? Is there anything you found confusing? Please share any feedback you have about today's lecture.

I learned how creating new data frames could be useful in regards to finding certain aspects about the original data frame. It was challenging but it was very satisfying to finally get it right.

My partner and I really struggled with section 2 of the lab, but after enough trial and error, we were able to get it to work (we think). Like all of the other labs, it was just a matter of referring back to the readings and notes and trying over and over again until we got something to run.

N = 50 responses

Last Time

What is something new you learned today? Is there anything you found confusing? Please share any feedback you have about today's lecture.

This lab was a little difficult but working with my lab partners made it a lot better. On this lab assignment, I learned that I am actually really comfortable with some of the R codes, which really surprised me. But it made me happy to know that I am getting comfortable. Besides being comfortable with a few codes, I am still having a hard time. What I found challenging is using multiply R commands in one code box.

N = 50 responses

Last Time

What is something new you learned today? Is there anything you found confusing? Please share any feedback you have about today's lecture.

I feel that today was a really good day in terms of my confidence in the material. It is very true when you all mentioned that sitting with the material and thinking it through is when the most learning happens. In previous sections, I was often paired with people who were practically experts already and knew what to do. ... Today, I was paired with someone different this time and admittedly coding is a bit of a struggle for us both; So it was nice as we were both comfortable and able to voice any questions without feeling like we were slowing anything down. As such, I feel that I was able to learn a lot today! In short, it was a good day!

N = 50 responses

Last Time

What is something new you learned today? Is there anything you found confusing? Please share any feedback you have about today's lecture.

😕 *I feel like I would benefit from a bit more instruction on how to approach coding generally. I came in with no prior experience and I just get the sense that I am missing something foundational.*

😕 *Honestly, this lab was the hardest so far and I feel kind of lost and frustrated. I drew a lot of the basic functions from Coursekata but I do not know how to apply the new applications that were being asked of me. I felt unprepared for the lab even when I did the Coursekata modules on time because the lab content is way more complicated.*

N = 50 responses

Last Time

What is something new you learned today? Is there anything you found confusing? Please share any feedback you have about today's lecture.

😕 *Besides being comfortable with a few codes, I am still having a hard time. What I found challenging is using multiple R commands in one code box. That's really hard for me to do and understand.*

😕 *I found this lab very challenging and confusing because there were a lot of long codes. I found it difficult to remember when to use filter, arrange, etc. I struggle most with the syntax of the code and remembering all of the rules.*

N = 50 responses

Next Time

I hear you!

Based on your comments, we will be holding regular "mini review sessions" at the end of each Lab cycle. Our first one will be this Wednesday!

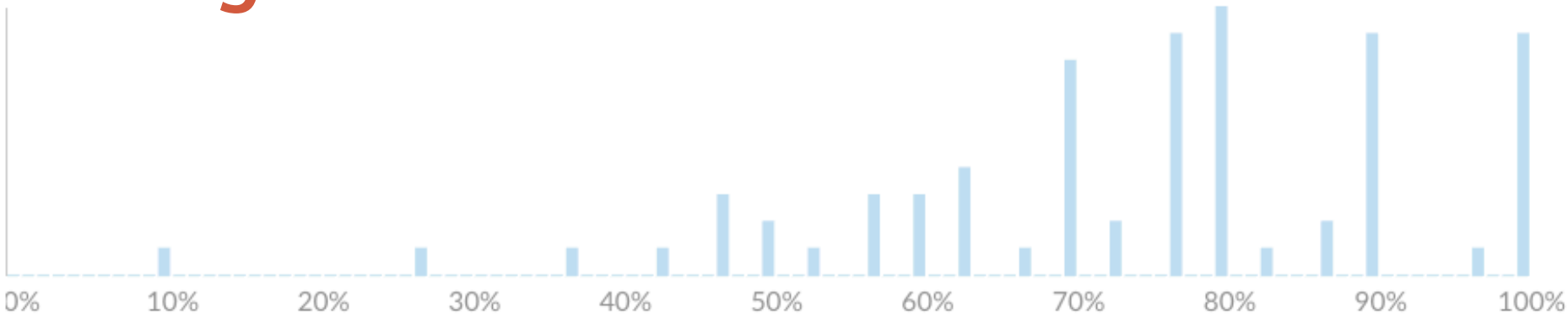
We will discuss:

- General strategies for approaching "debugging" your code when things aren't working
- Tips on how to read box plots, histograms, and comment on the "shape" of distributions
- Tips on chaining together operations on dataframes and working with variables in R
- Review the idea of a data-generating process (DGP) and how it relates to the actual sample of data we observe

Practice Quiz 2

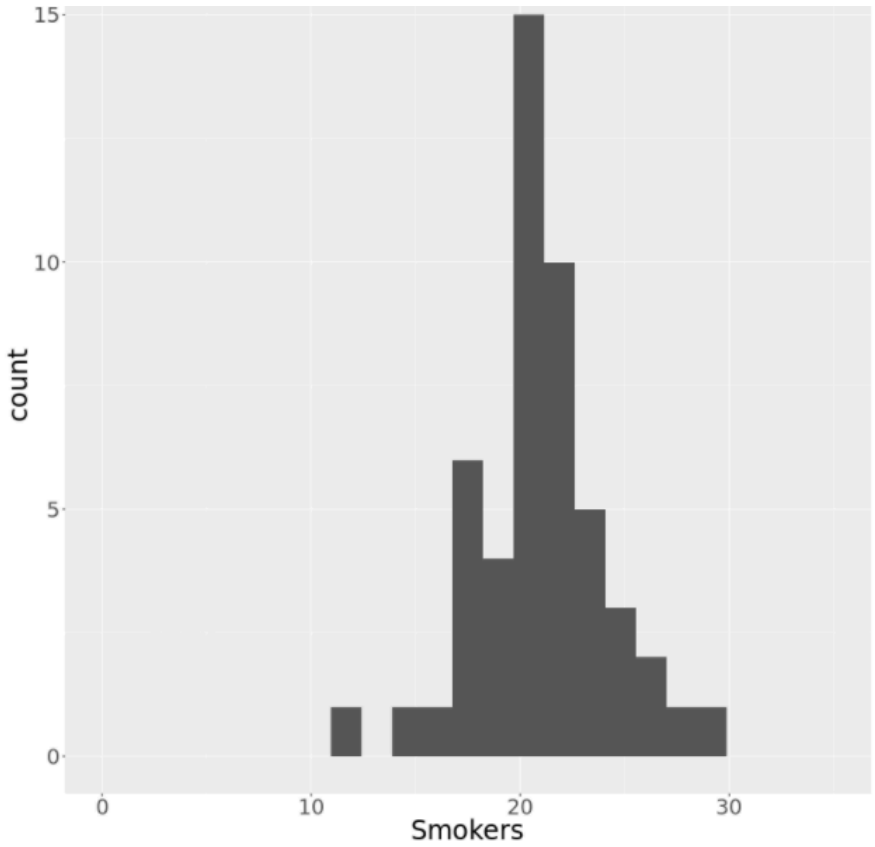
Average Score	High Score	Low Score	Standard Deviation	Average Time
74%	100%	10%	1.84	08:29

Strong start!



Please take time to review the questions you missed on the practice quiz, in preparation for Real Quiz 2 this week.

Suppose this is a histogram visualizing the variation in the prevalence of smoking across different U.S. states. Specifically, the x-axis represent the percentage of residents in a given state who smoke and the y-axis represents the number of states. Locate the bin that represents the states with the highest percentage of residents who smoke. Which of the following numbers is closest to the center of that bin?



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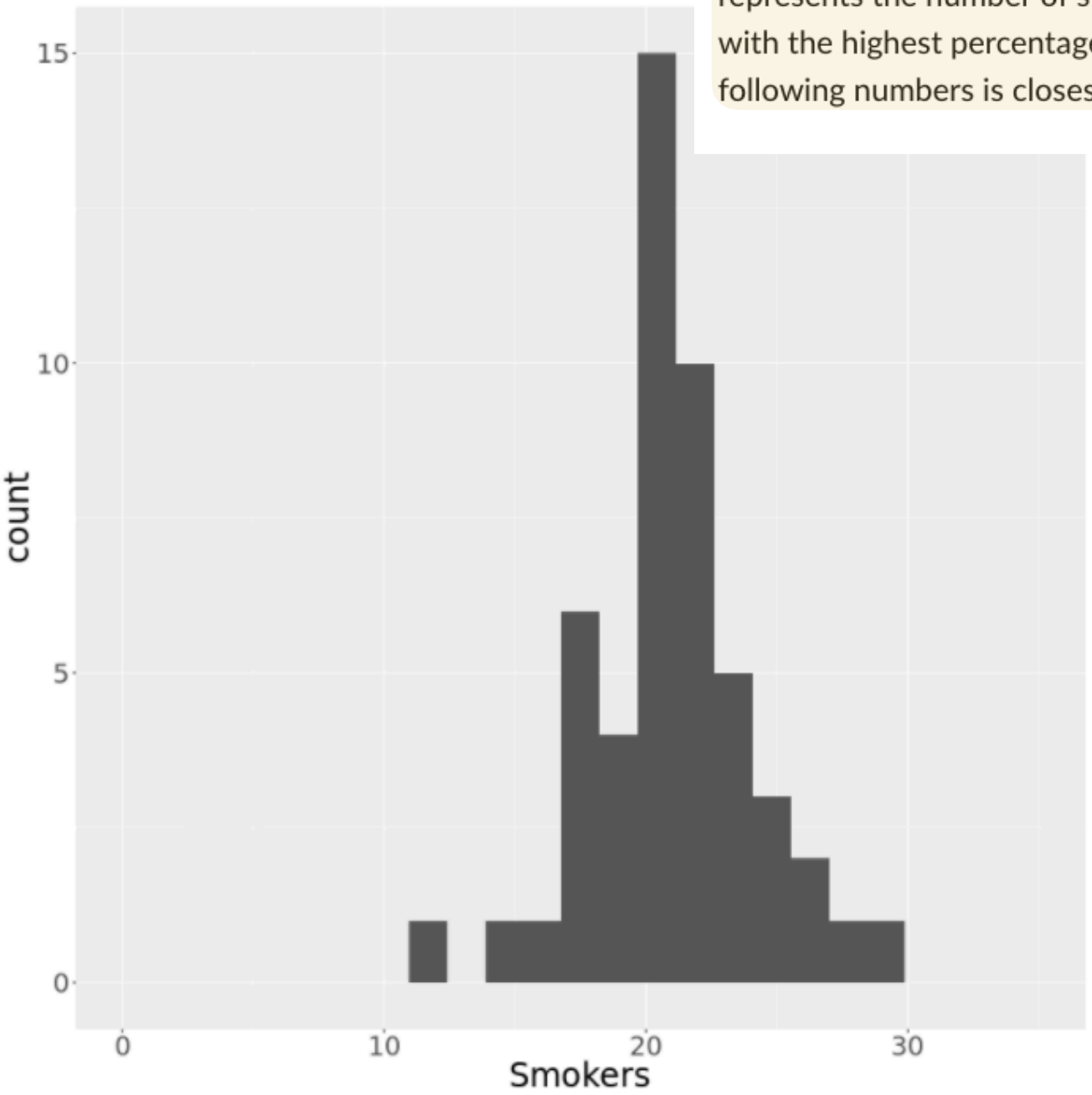

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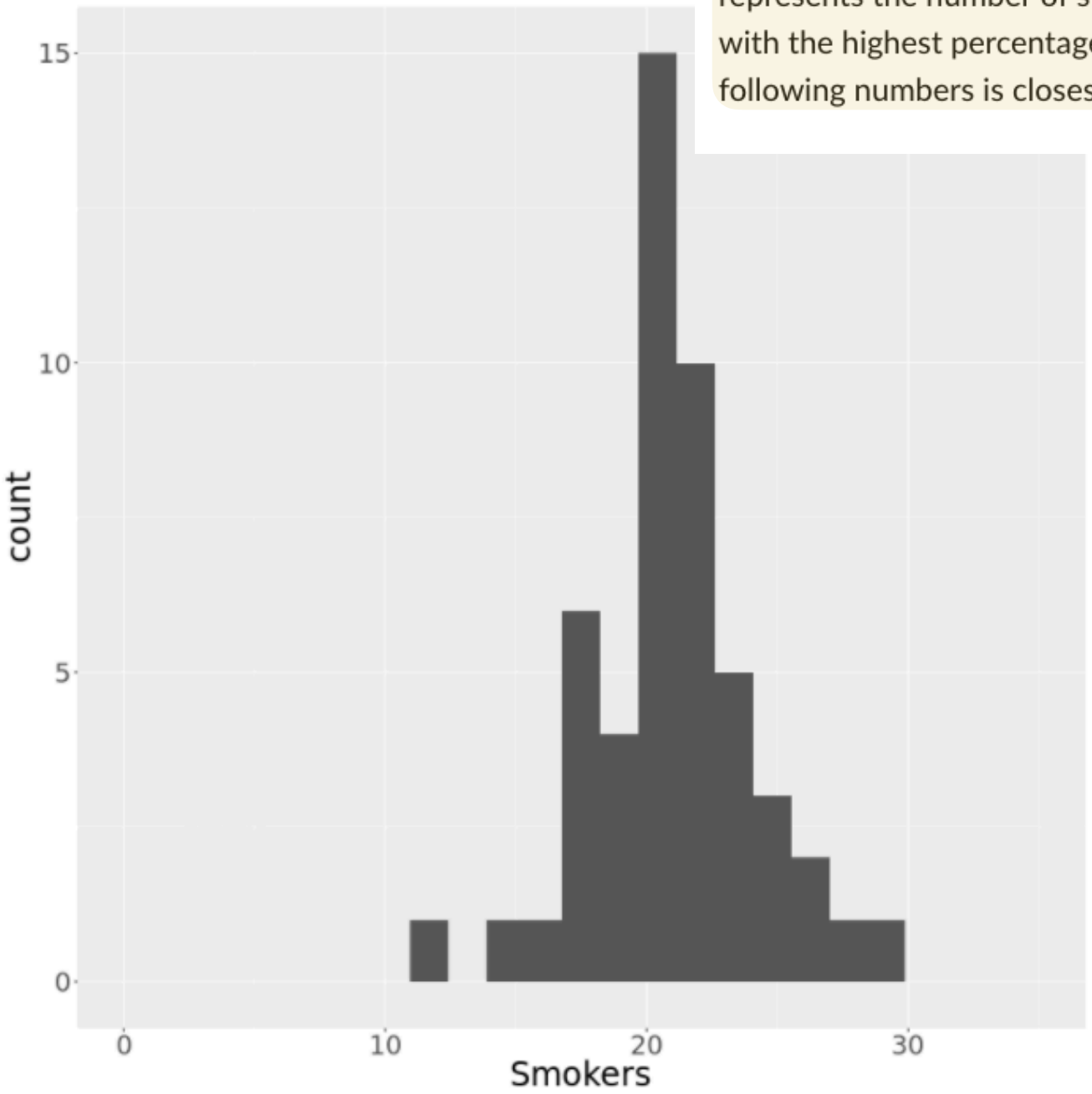

What are some ways a statistical model helps us understand the world?

Statistical models help account for variation in our measurements.	59 respondents	82 %	
Statistical models allow us to make educated guesses about what will happen in the future.	59 respondents	82 %	
Statistical models can prove that two variables are causally related to each other.	23 respondents	32 %	
Statistical models help us find patterns in data and understand what factors may explain those patterns.	70 respondents	97 %	

Suppose you are working with a dataset called **Mood**, which contains a variable called **Days** that has encoded various days of the week (i.e., Monday, Tuesday, Wednesday) as numbers between 1 and 3. You want to recode these numbers to be the actual names of the days they correspond to and save them in a new variable within the dataset called **Days.recode**. Which line of R code will do that?

Days.recode <- recode(Mood$Days, "1" = "Monday", "2" = "Tuesday", "3" = "Wednesday")	30 respondents	42 %	
Days.recode <- recode(Mood$Days, "1" = Monday, "2" = Tuesday, "3" = Wednesday)	16 respondents	22 %	
Mood$Days.recode <- recode(Mood$Days, "1" = Monday, "2" = Tuesday, "3" = Wednesday)	2 respondents	3 %	
Mood$Days.recode <- recode(Mood$Days, "1" = "Monday", "2" = "Tuesday", "3" = "Wednesday")	23 respondents	**32 %**	
No Answer	1 respondent	1 %	

Go to: https://psyc60.github.io/

Basic Course Information

Note: In order to join the lecture, you must register with your UCSD Zoom account first.

Quarter	Lecture	Zoom Meeting ID
Spring 2021	Mon/Wed 1-2:20pm	930 5497 7550

Teaching Team

Note: Please join your discussion section and/or office hours by clicking the link embedded in the table.

Name	Role	Section ID	Section Time	Office Hours
Judith Fan	Instructor	N/A	Wed 9am-10am	
Isabella Destefano	TA	42054 (A04)	Tues 1pm	Tues 12pm-1pm
Zhe Huang	TA	42052 (A02)	Mon 4pm	Fri 11am-12pm
Jarrett Lovelett	TA	42051 (A01)	Mon 3pm	Mon 12pm-1pm
Saurabh Mirani	TA	42057 (A07)	Wed 11am	Fri 12pm-1pm
Jeffrey Xing	TA	42055 (A05)	Wed 9am	Wed 12pm-1pm
Justin Yang	TA	42053 (A03)	Tues 11am	Mon 5pm-6pm
Xinran Zhang	TA	42056 (A06)	Wed 10am	Tues 11am-12pm
Lea Bronnimann	SI Leader	N/A	SI Sessions	

Look up your TA's office hours using this table! Just click the time to join their Zoom room.

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Lea's SI session schedule is linked here, too. They're 3x / week!

And now for a brief announcement from our fearless **Supplemental Instruction (SI) Leader, Lea Bronnimann**!

Due This Week

4	Apr 19	**Visualizing data, III** *Before:* Chapter 4 *During:* Lab 2C	**Review Session** *Before:* None *During:* Wrap-up Lab 2	Quiz 2	Project Milestone 2 Due (Exploratory data visualization)

If you have not completed the Chapter 4 modules, please do so ASAP!

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Due This Week

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Use the worksheet from discussion section this week on REFINING your data visualizations revise your exploratory data visualizations before submitting them this Friday!

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Everyone come back at 2:10pm PT

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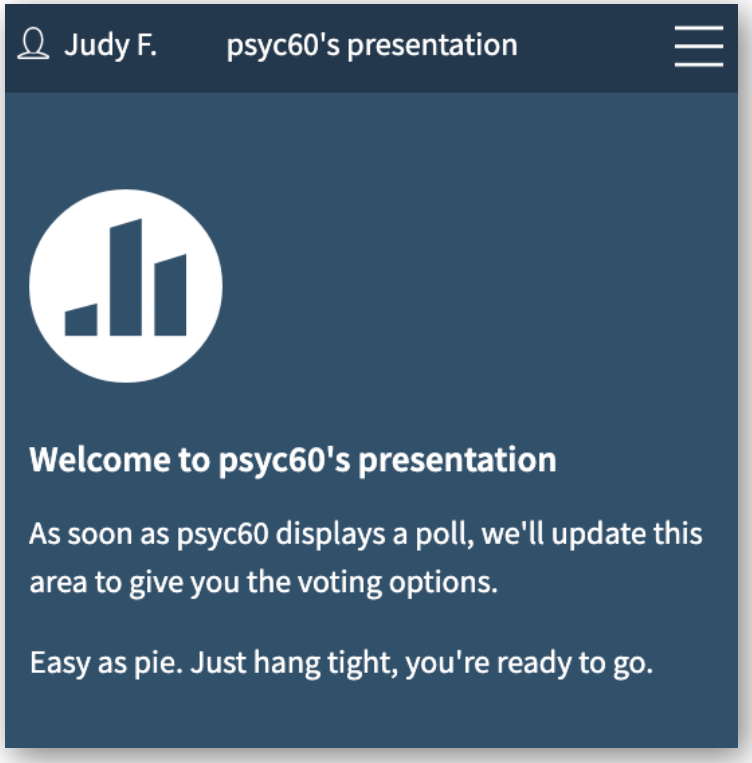
Debrief

1. Take your phone or laptop out.
2. Make sure you are connected to the internet.
3. Open any web browser & type in this URL:

   PollEv.com/psyc60

4. 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: Lab2C | General Impressions

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

0 done

0 underway