

Agenda

- Warm Up 5 min
- Kitty Genovese 10 min
- What do you believe? 15 min
- Latane & Darley (1968) 10 min
- Review Warm Up 5 min
- Bureaucratic stuff 10 min

– *Update:*

- Wednesday 2/19 → Paper airplanes
 - Thursday 3/26 → Casino Day
 - Wednesday 4/15 → Tossing Hershey's kisses
- Exit Pass

Homework (AP)

1. Read the syllabus thoroughly.
2. Go to the class website (URL on syllabus). Look around.
3. Pg.7 #1, 2, 5
4. “Student questionnaire” (green)
5. ANONYMOUS Statistics survey (yellow)

Warm Up

Find your name tag.

Read the *definitions (in green)* below, then use your “Warm-Up” form () to answer questions #1-3:

Quantitative: Uses numerical values for which arithmetic operations (adding, averaging, etc.) make sense. *Ex: Hair length.*

Categorical: Places an individual into one of several groups or categories. *Ex: Hair color.*

- 1) Write down 1 example of a “categorical” variable.
- 2) Write down 1 example of a “quantitative” variable.
- 3) Is a phone number categorical or quantitative? Why?

Catherine Susan “Kitty” Genovese

- March 13th 1964, Queens, New York City
- Arrived home at 3:15am, parked 100 feet from apartment
- Approached by Winston Mosley
- Ran away, stabbed twice in back
 - Screamed “Oh my God, he stabbed me! Help me!”
- Mosley ran away, returned 10 minutes later
- Found Kitty, barely conscious, at doorstep
- Stabbed her repeatedly, stole \$49
- Entire attack lasted 30 minutes. **Heard by 12 neighbors.**
- *Why didn't anyone call the police?*

What do you believe?

- I will put a question up on the board.
- Go to the Station that is closest to your opinion.
 - Yes, definitely.
 - Yes, with some limitations.
 - Neutral, or Decline to state.
 - No, with some limitations.
 - No, definitely not.
- *Practice:*
 - *You like Hawaiian-style pizza. (ham and pineapple)*

What do you believe? (5 total)

1. Should the legal drinking age be lowered to 18?
2. Should teenagers have access to free condoms on high-school campuses?
3. Should marijuana be legal recreationally?
4. Should we have more gun control laws?
5. Should there be a wall along the border between the United States and Mexico?

Why I Love Statistics

1. They solve arguments.

What do you believe? (5 total)

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Catherine Susan “Kitty” Genovese

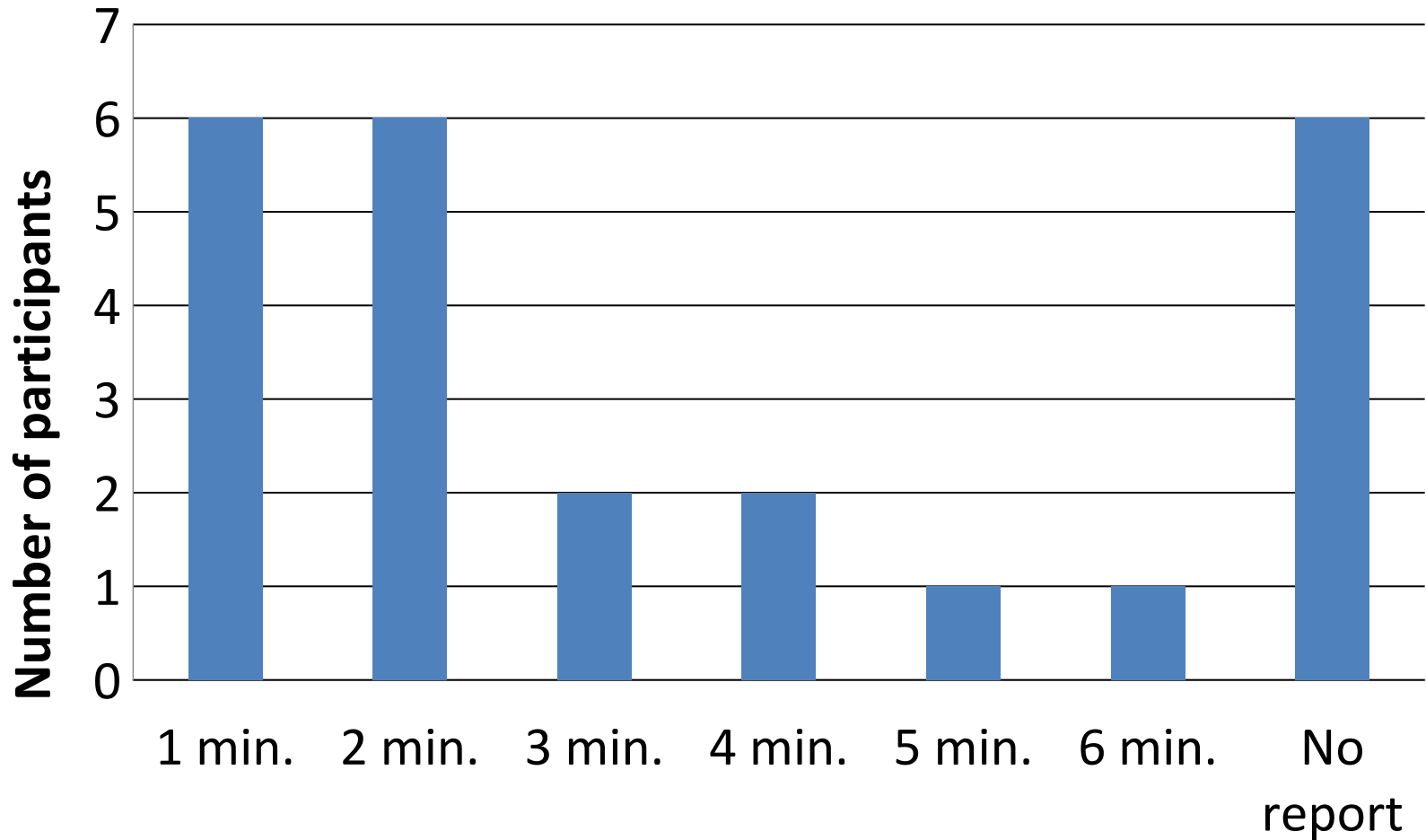
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Latane & Darley (1968)

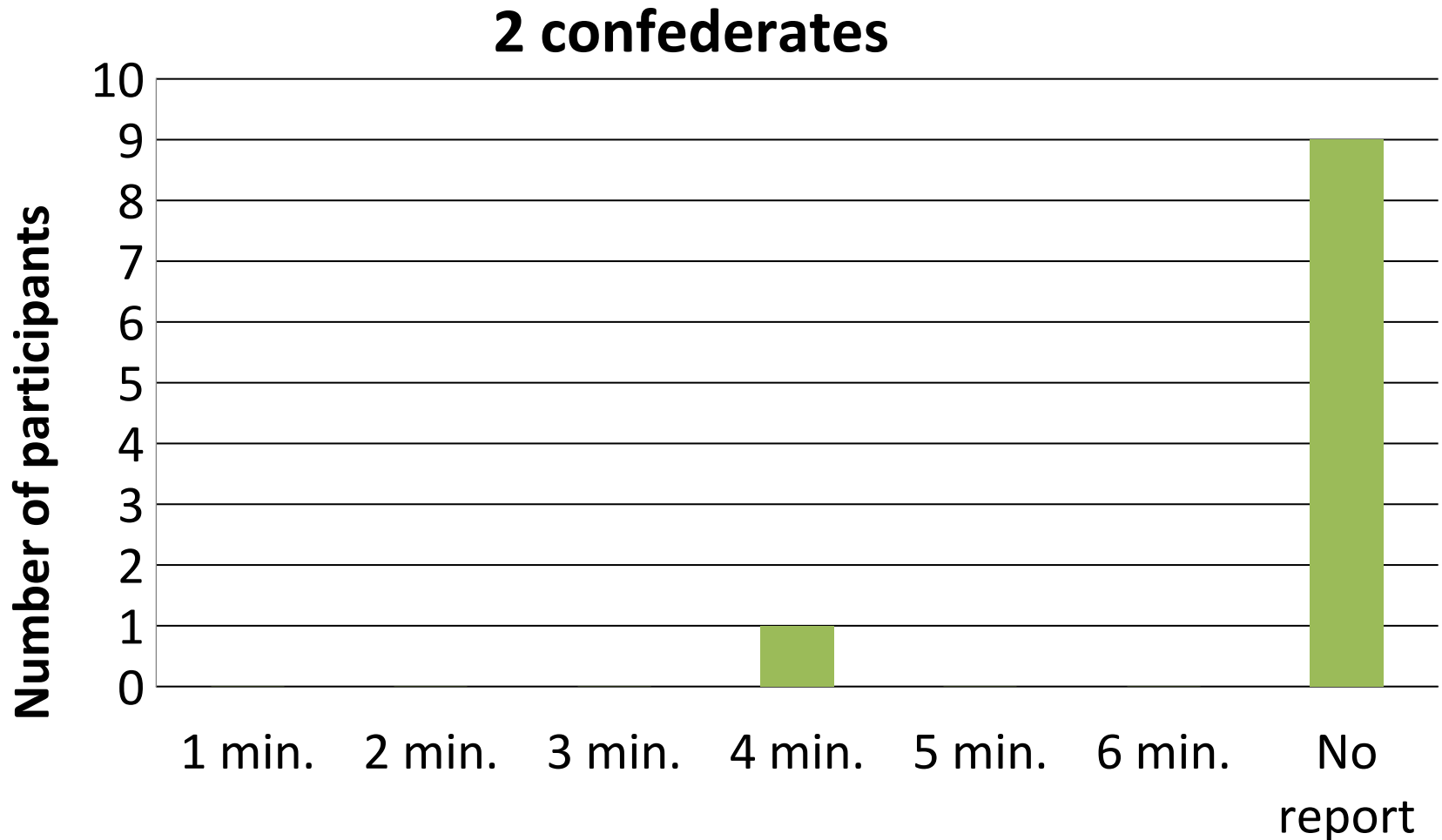
- Hypothesis: People are less likely to help in an emergency if other people are around.
- Individual in room, taking a “questionnaire”
- Fake smoke comes through vents
- Two conditions:
 - Alone, or
 - With two confederates who don’t respond

Latane & Darley (1968)

Alone

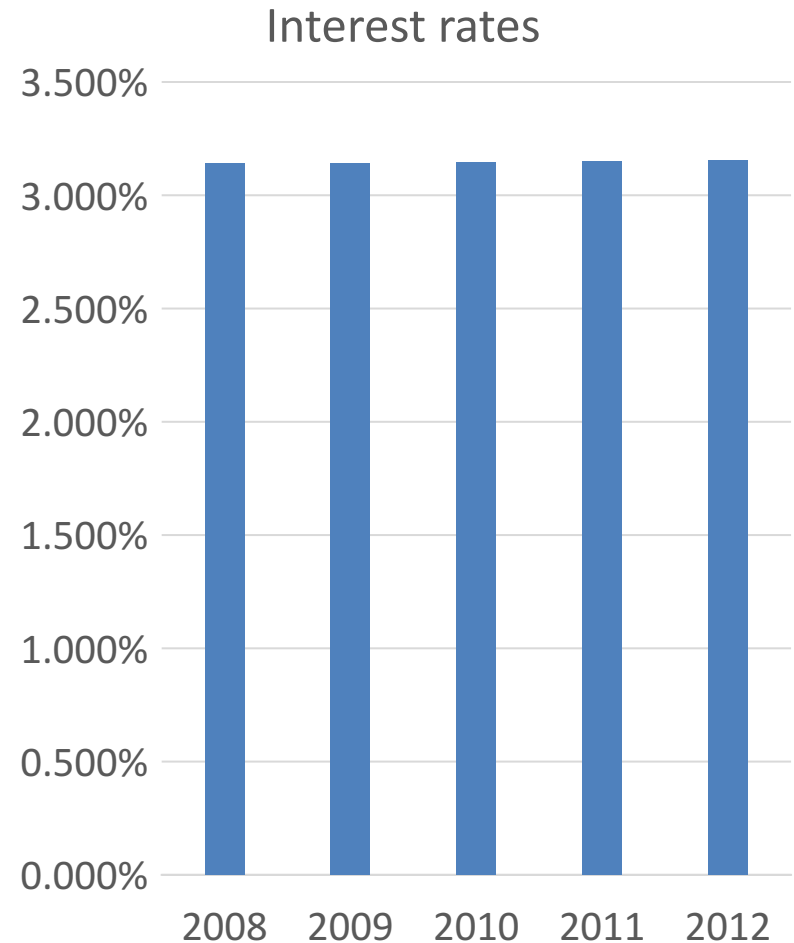
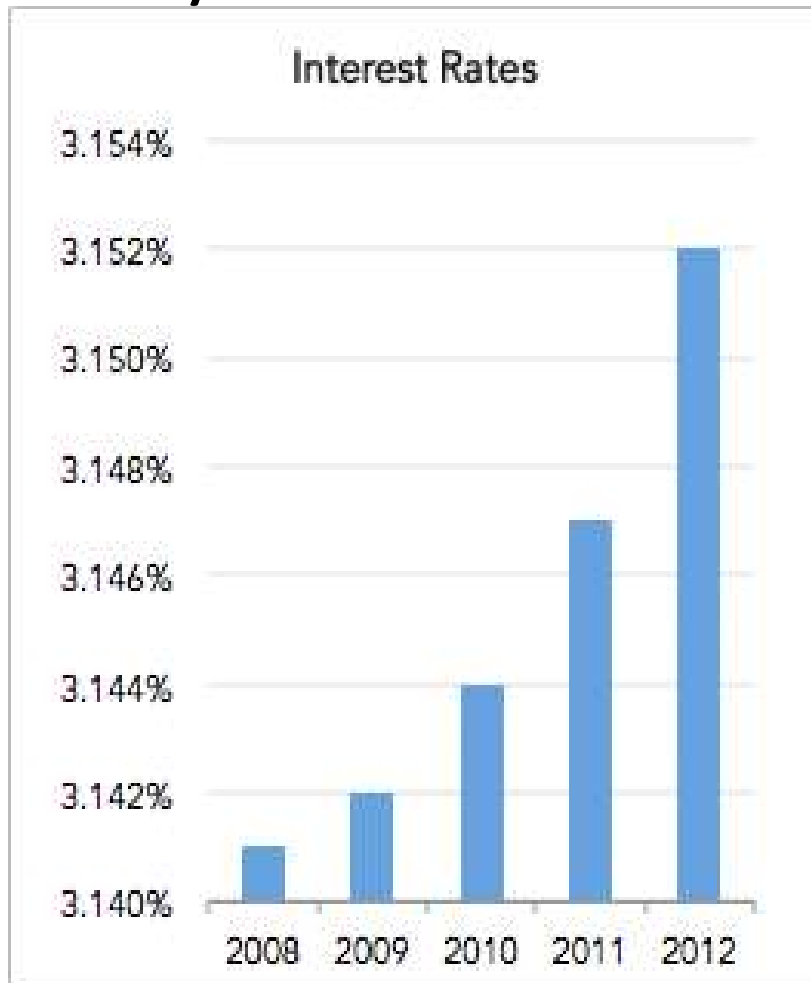


Latane & Darley (1968)



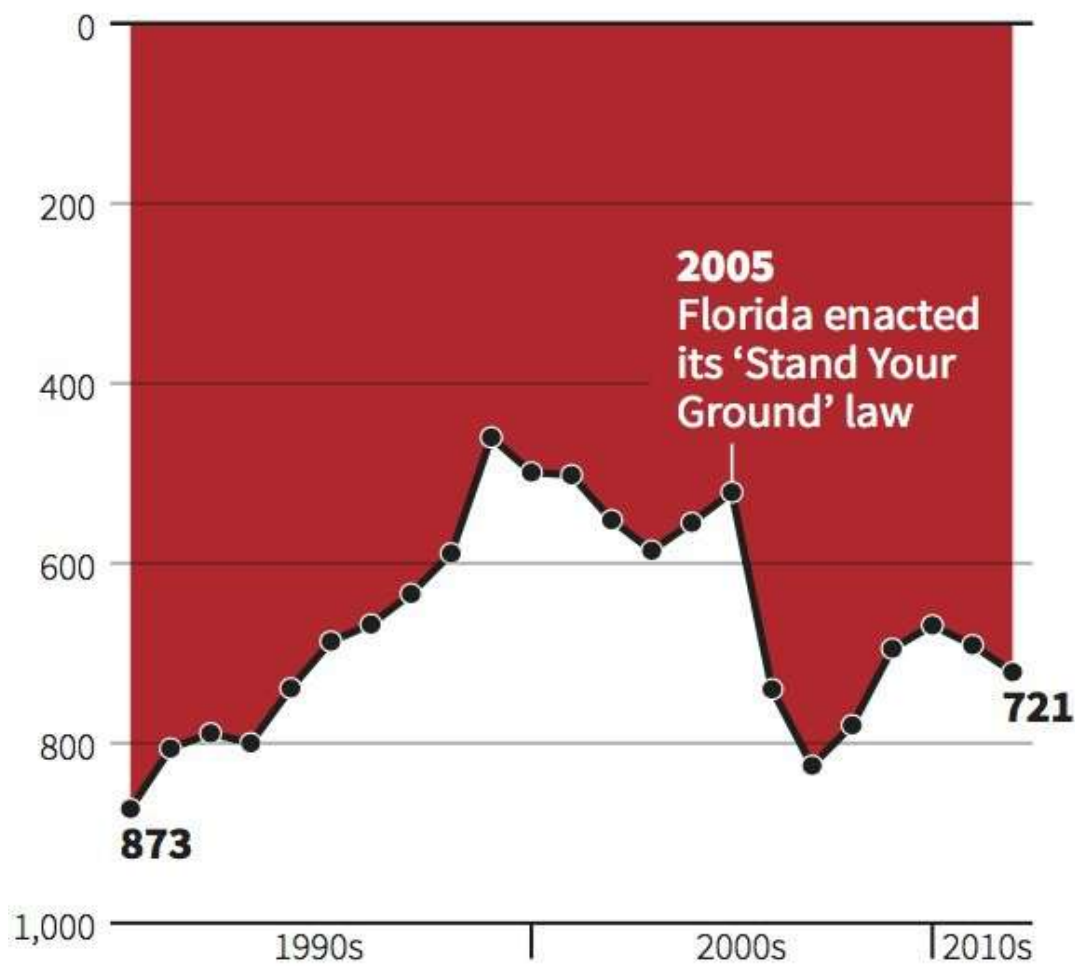
Why I Love Statistics

1. They solve arguments.
2. They deceive.



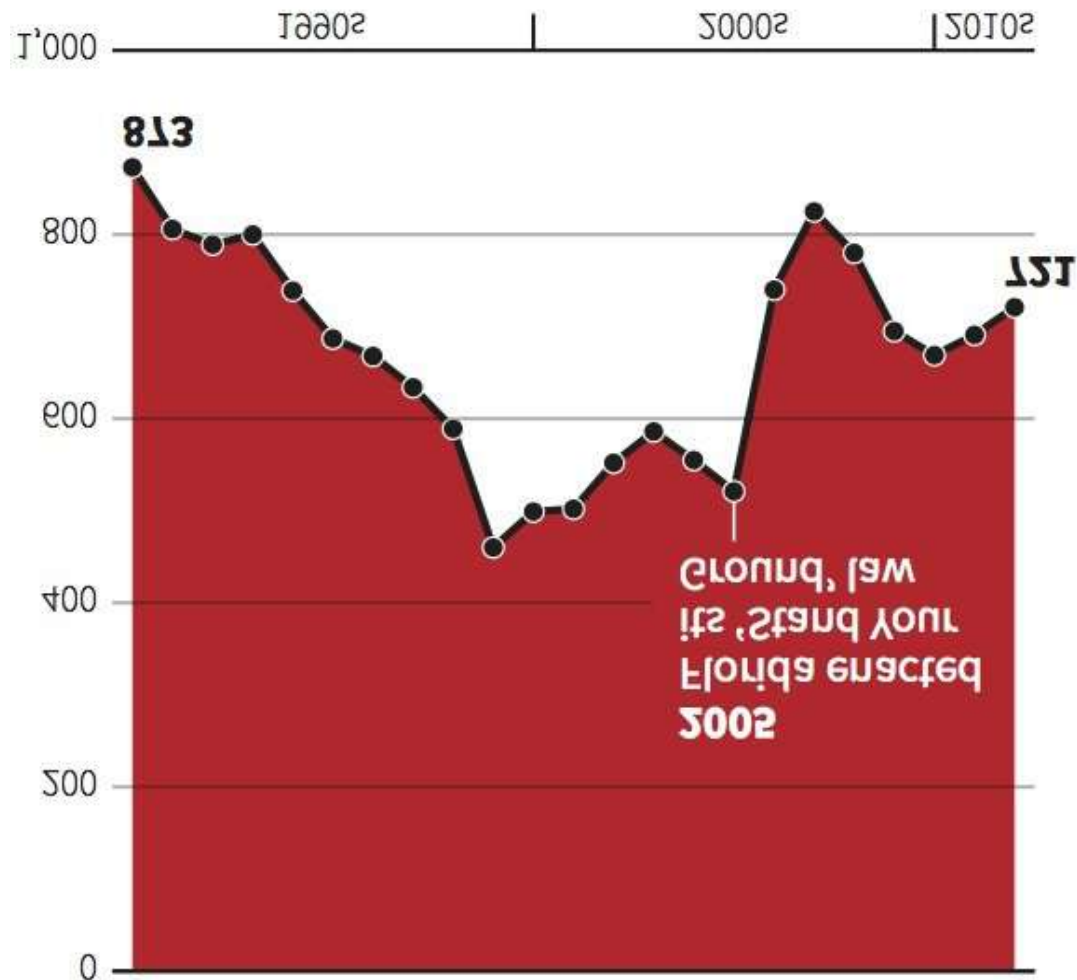
Gun deaths in Florida

Number of murders committed using firearms



Source: Florida Department of Law Enforcement

Source: Florida Department of Law Enforcement



Number of murders committed using firearms

gun deaths in Florida

Bureaucratic Things

My rules~~s~~

1. Don't waste my time.

Don't waste my time.

Don't waste my time.

Don't waste my time.

Don't waste my time.

Don't waste my time.

Smartphones and “Brain Drain”

- Adrian Ward, University of Texas at Austin, April 2017
- **Study design:**
 - Participants were randomly told to place their smartphones: 1) on the desk face down, or 2) in their pocket.
 - All phones were silenced.
 - Participants took tests that measured participants’ available cognitive capacity (ability to hold & process data).
- **Results:**
 - Participants with phones on desk face-down had significantly lowered cognitive capacity.
 - Mere presence of smartphone impairs cognitive functioning.....even though people think they’re giving full attention to a task.
 - Didn’t matter if phone was turned on vs. off, or face up vs. face down.

Your cognitive capacity is significantly reduced when your smartphone is within reach....even if it’s off, or facing down.

Syllabus

- Keep this. Read this. It has a lot of important information.
- Website → rivercity.wusd.k12.ca.us/subsites/James-Colligan
- Homework → recommended-but-optional, usually odd #'s (to check answers in back), may be used on “Checkups”
 - “Checkups” → 15% of grade, 5-10 min. at start of class, ~same as HW.
- Supplies needed
 - Pencil, eraser, dry-erase marker, notebook, [graphing calculator](#).
 - I have in-class set. For at-home, buy one (\$60-80) or go to:
sites.google.com/site/ti83interactivecalculator
- Extra help, Tuesdays 3:40-4:40 or by appointment.
- Retake policy
 - 1 test retake and 3 checkup retakes per term, within 2 weeks of original exam. Give me 2 days' notice.
 - Retake grade is new grade, even if lower.
- Grades — 55% Tests, 15% Assignments/Checkups, 15% Projects, 15% Final
- Course summary (units, tests, important dates), subject to change.

Other stuff (AP)

- Bathroom
- Sign up for our AP classroom. Go to myap.collegeboard.org. Use the code:

Period 1 → 2VGWGJ

Period 3 → A9NVWZ



Pass out code

- Grab a textbook, **orange (AP)**. Say your first & last name to me, and show me the book ID (on the side, written in Sharpie).
- **Mr. Colligan's Statistics Survey (yellow)**
 - Do NOT write your name.

Warm Up (go over)

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- 3) Is a phone number categorical or quantitative?

“Make-a-List”

- Desk partners, share 1 whiteboard.
- Take turns writing down answers
- Winner = longest list

Example:

Prime numbers

“Make-a-List”

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Your topic is.....

Quantitative variables

“Make-a-List”

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- Take turns writing down answers
- Winner = longest list

Your topic is.....

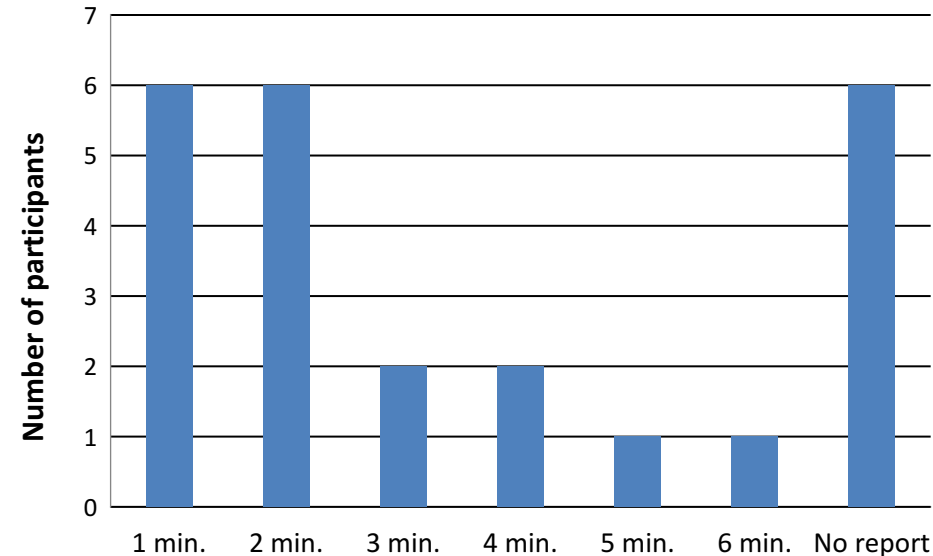
Categorical variables

2pts each for categorical variables consisting of numbers

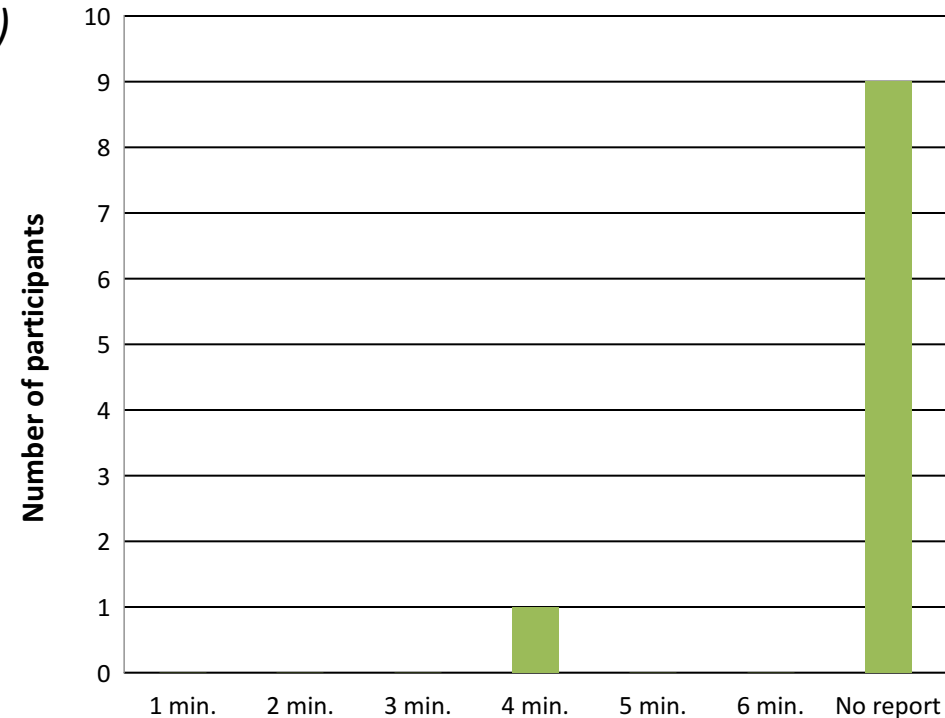
Bar graph

- A chart with rectangular bars, with lengths proportional to the values they represent.
 - Can be plotted vertically or horizontally.
- *Example, Latane & Darley (1968)*

Alone



2 confederates



We try

Let's say you were eligible to vote in the last presidential election. Who would you vote for?

Choose the following:

- | | |
|-----------------|----------------------|
| Donald Trump | (Republican Party) |
| Hillary Clinton | (Democratic Party) |
| Darrell Castle | (Constitution Party) |
| Dr. Jill Stein | (Green Party) |
| Gary Johnson | (Libertarian Party) |

You try

- In August 2005, researchers for the American Society for Microbiology & the Soap and Detergent Association monitored the behavior of more than 6000 users of public restrooms. They observed people in public venues such as Turner Field in Atlanta and Grand Central Station in New York City.
 - 2393 men washed their hands, and 813 men did not wash their hands.
 - 2802 women washed their hands, and 328 women did not wash their hands.
1. *Make a bar graph that displays this information.*
 2. *Based on this data, would you rather shake hands with a man or a woman?*

Chart 1 of 3

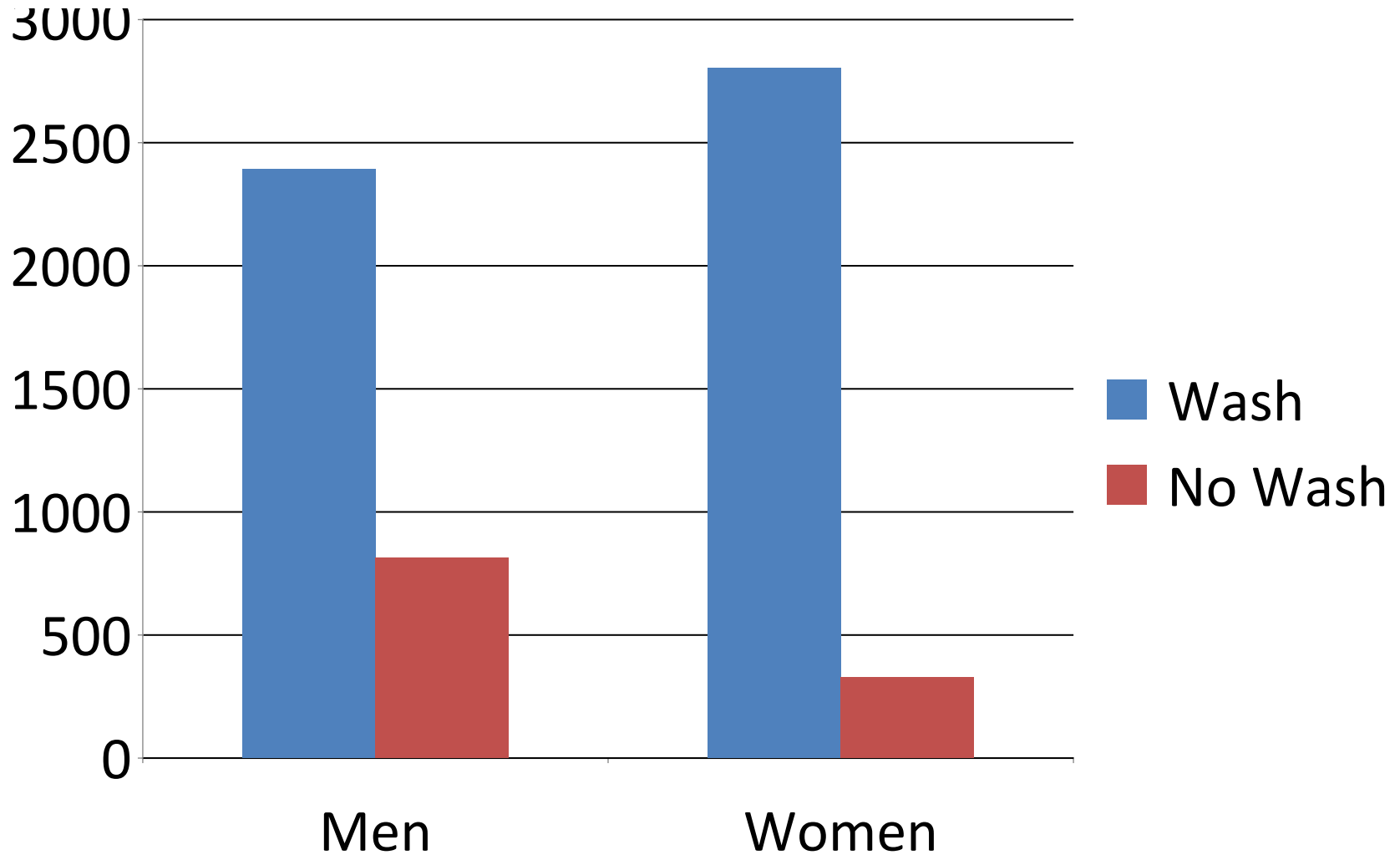


Chart 2 of 3

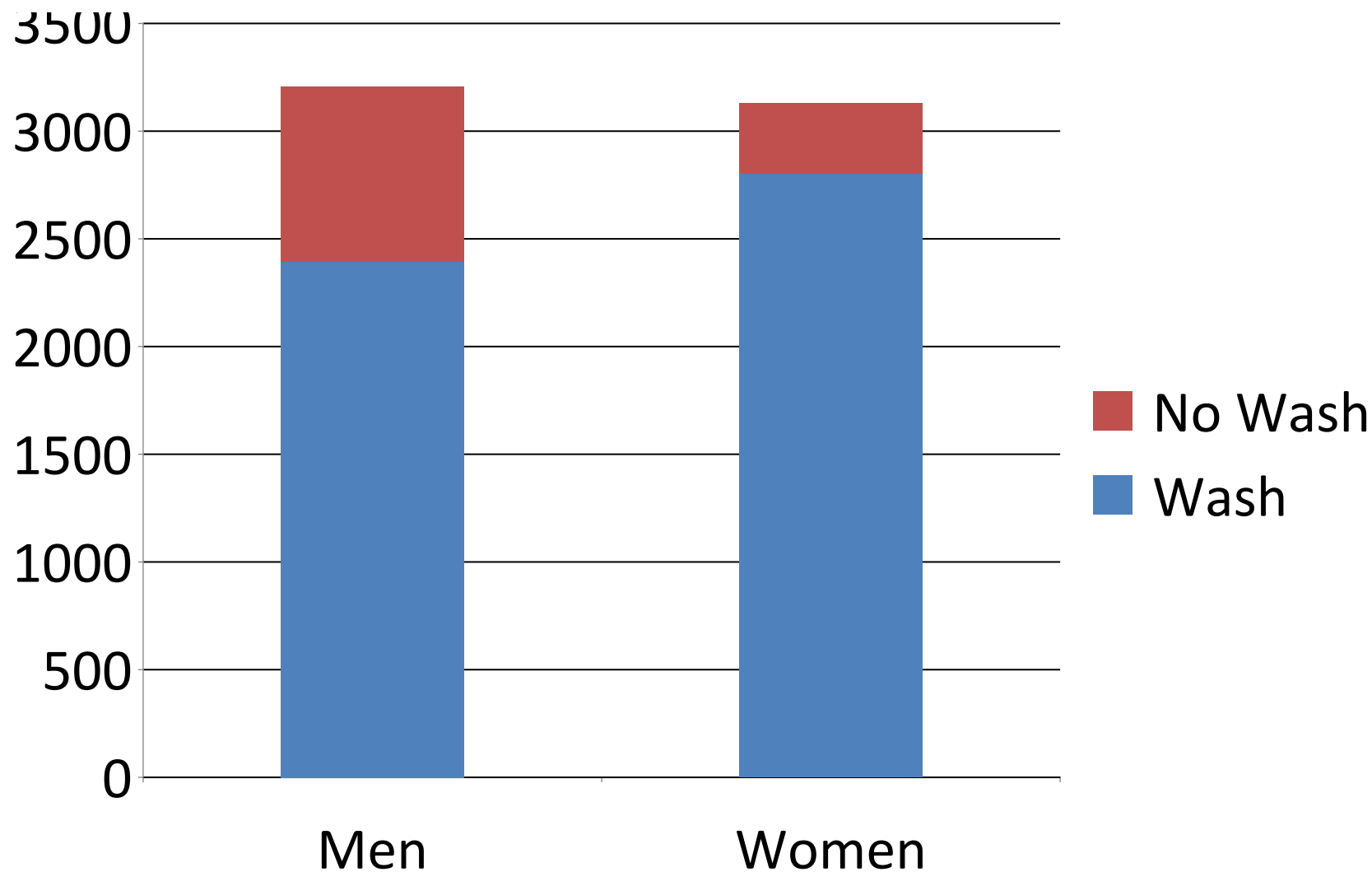
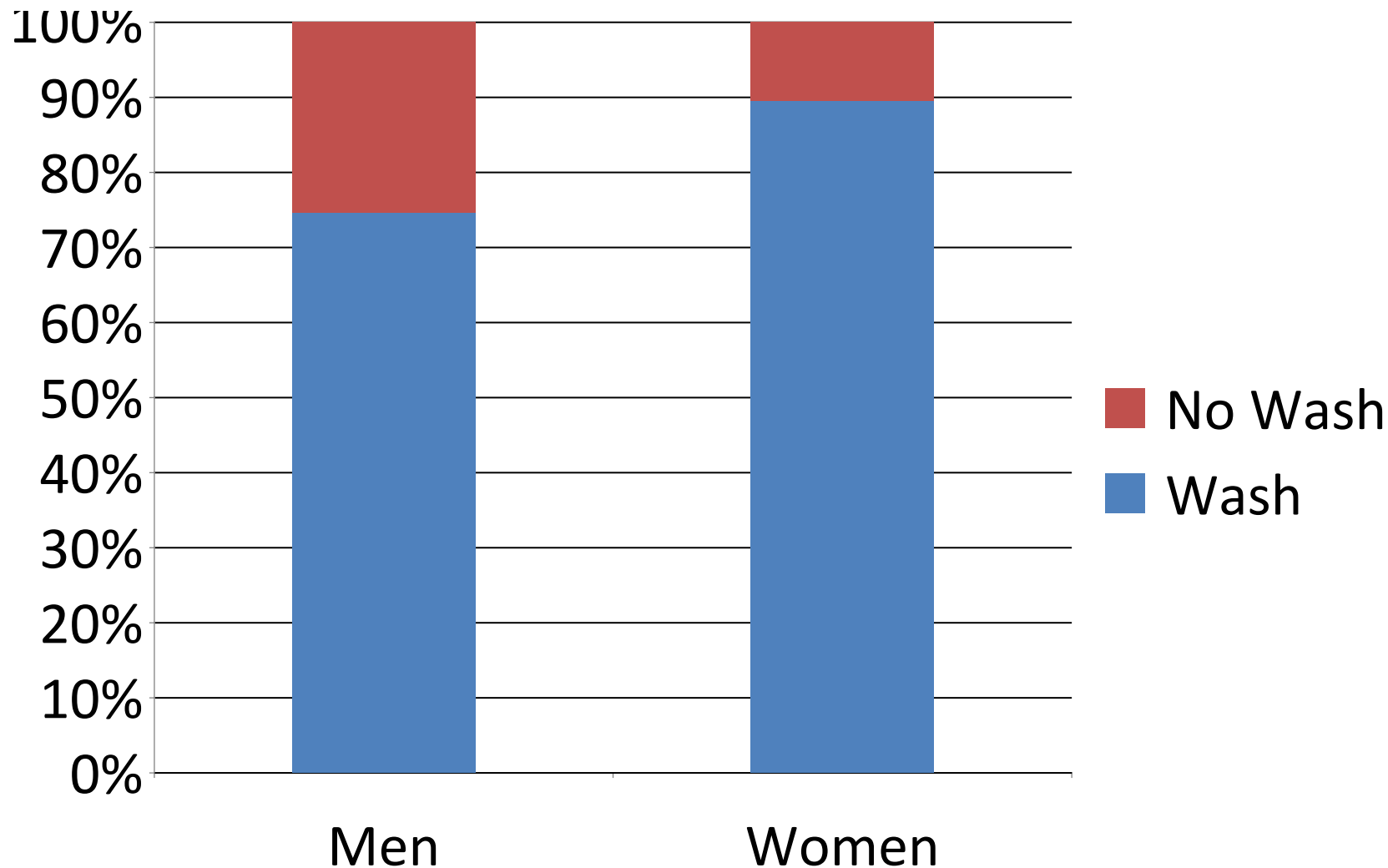
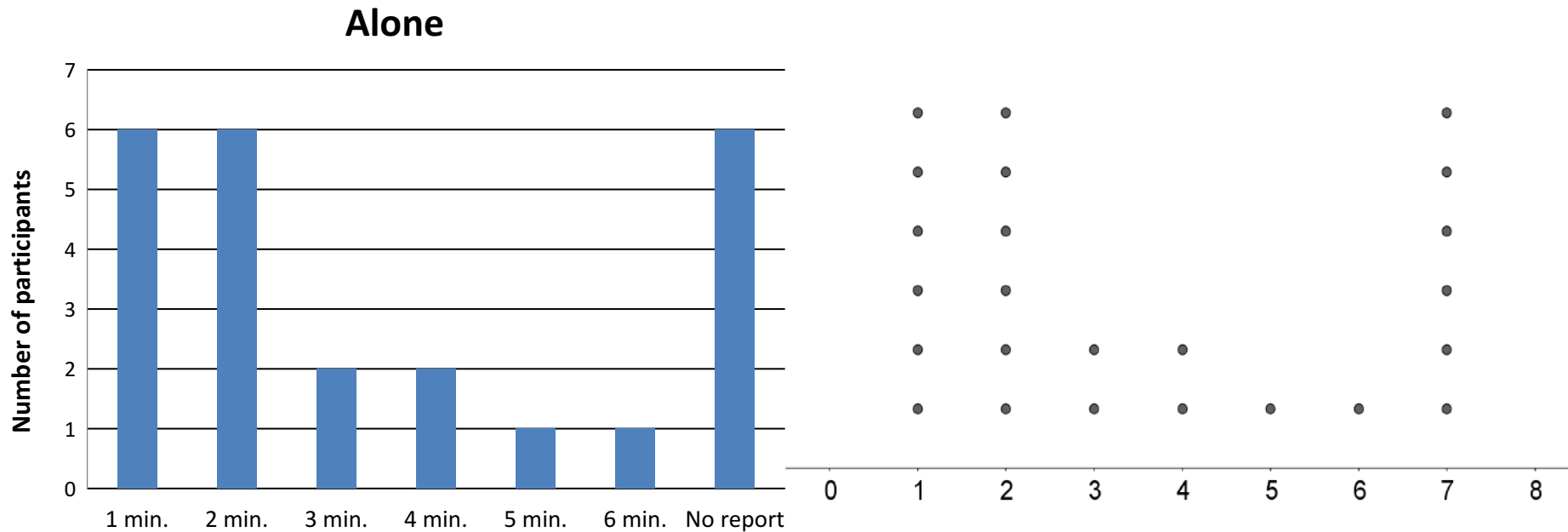


Chart 3 of 3



Dot Plot

- A chart of data points plotted on a simple scale, typically using dots.
- *Example: Latane & Darley (GeoGebra)*



You try

How many states have you visited for at least 24 hours?

Exit Pass (AP)

*Be in your seat when the bell rings.
Push in your chair as you leave.*

1. Write down an email address (school or non-school) that you check regularly.
2. Make a bar graph of the class (freshmen, sophomore, junior, senior) of the students in this room.

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6. Sign up for AP classroom. **Period 1: 2VGWGJ. Period 3: A9NVWZ**