Spring 2025

Summaries and Insights

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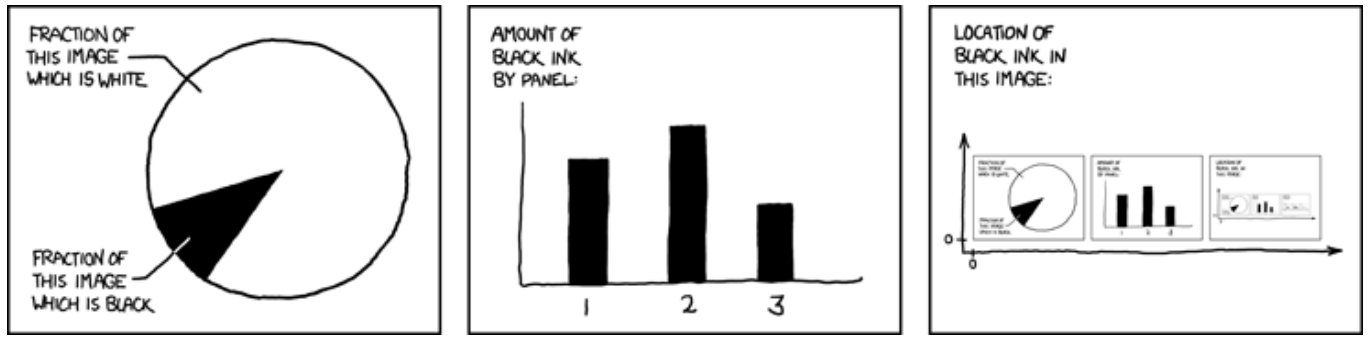


Retrieved from: https://xkcd.com/688/

About Campus Pulse

Campus Pulse ask a different sample of CSULB students about their overall experience, and other topical or timely issues, each month. The goal is to better understand where students are thriving or in need of additional support, and the methodology – focusing on unique subsamples of students across different time points – is designed to address survey fatigue. The survey was developed and is administered by the Student Affairs Office of Evaluation and Assessment.

Fall Survey

- Duration: September – November
- 1000 invitations
- 621 participants

Spring Survey

- Duration: February – April
- 1000 invitations
- 492 participants

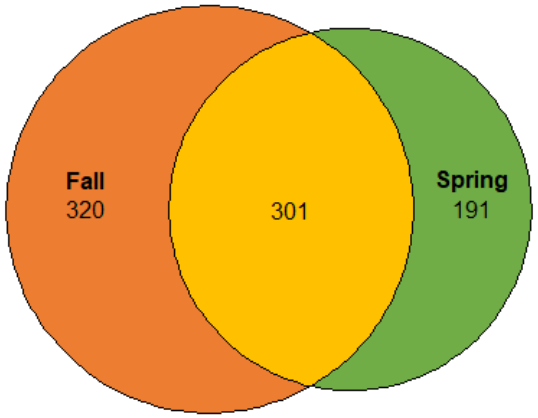
Definitions

- **Participants**: Individuals who *clicked* on survey link
- **Respondents**: Individuals who *provided* responses
- **Completionists**: Individuals who *finished* the survey

Notes

- Response rates vary by question
- Not all participants are respondents
- Not all respondents are completionists

Participation and Completion: A First Look

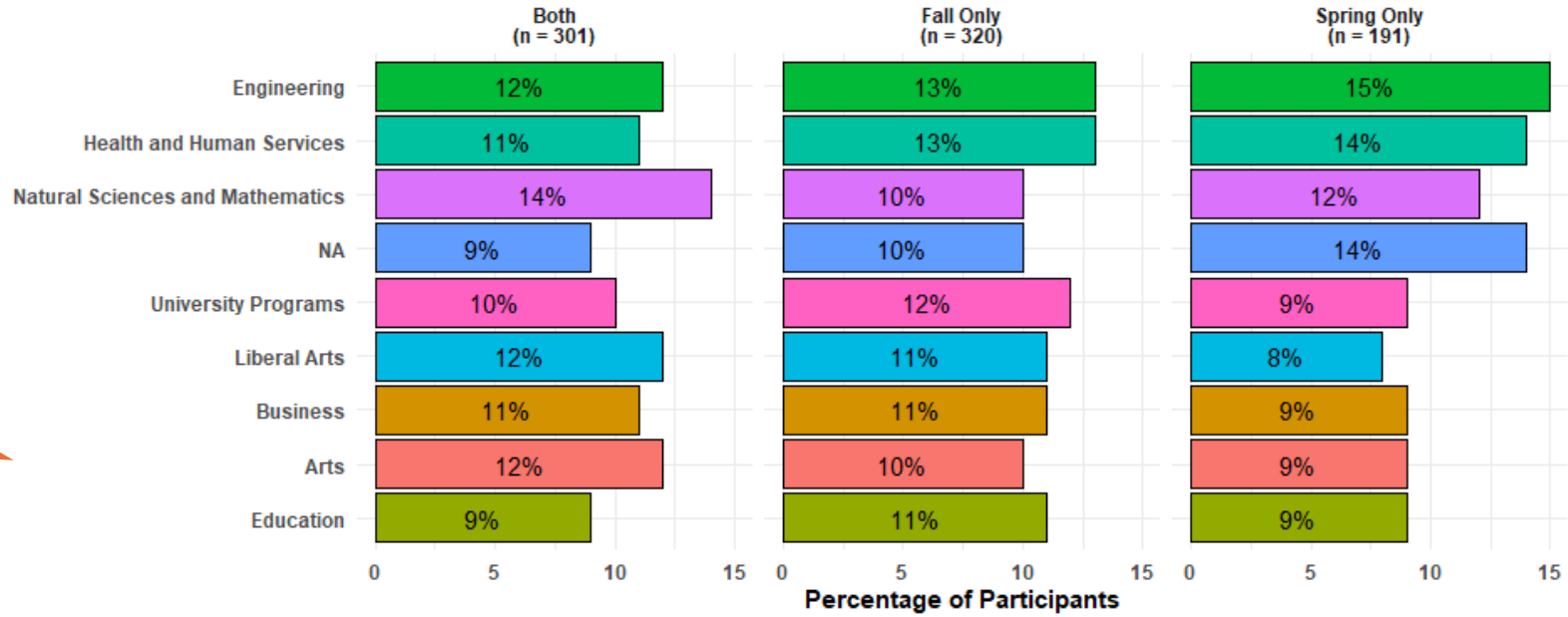


812 unique participants across both surveys

- 301 participated in **both** surveys
- Fall: 320 unique + 301 = 621 total
- Spring: 191 unique + 301 = 492 total

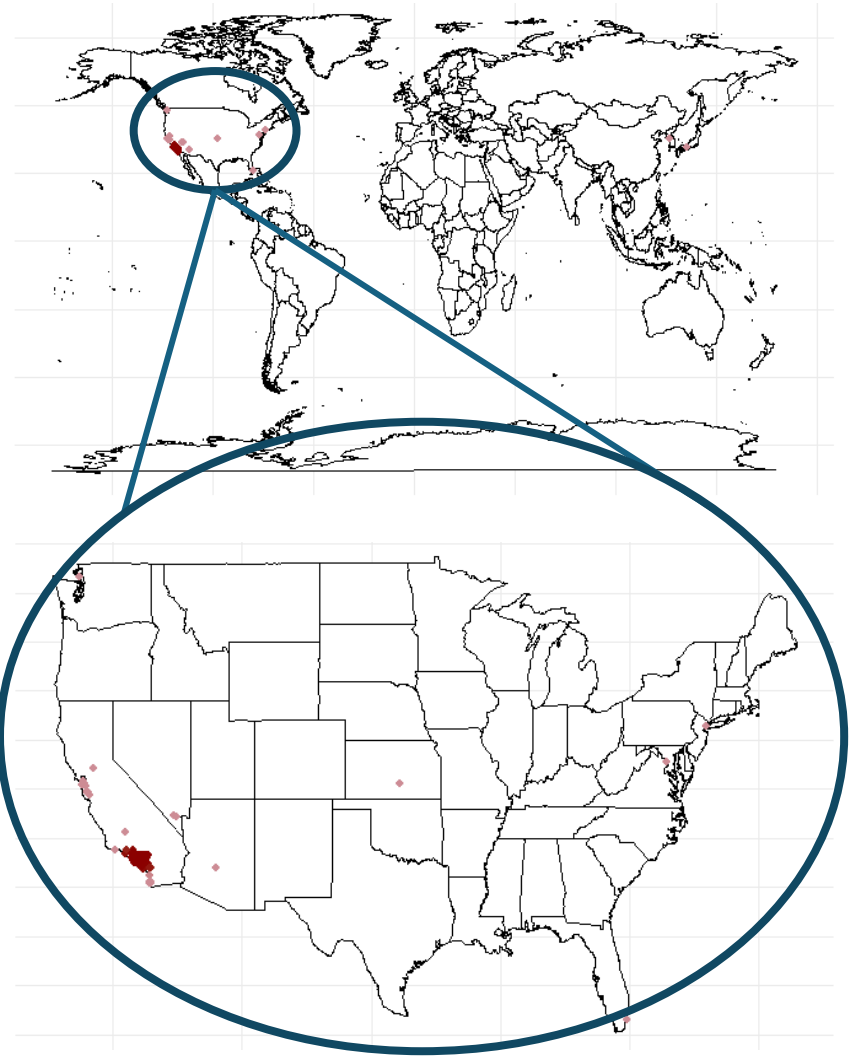
320 + 301 + 191 = **812**

Survey participation was consistent across colleges

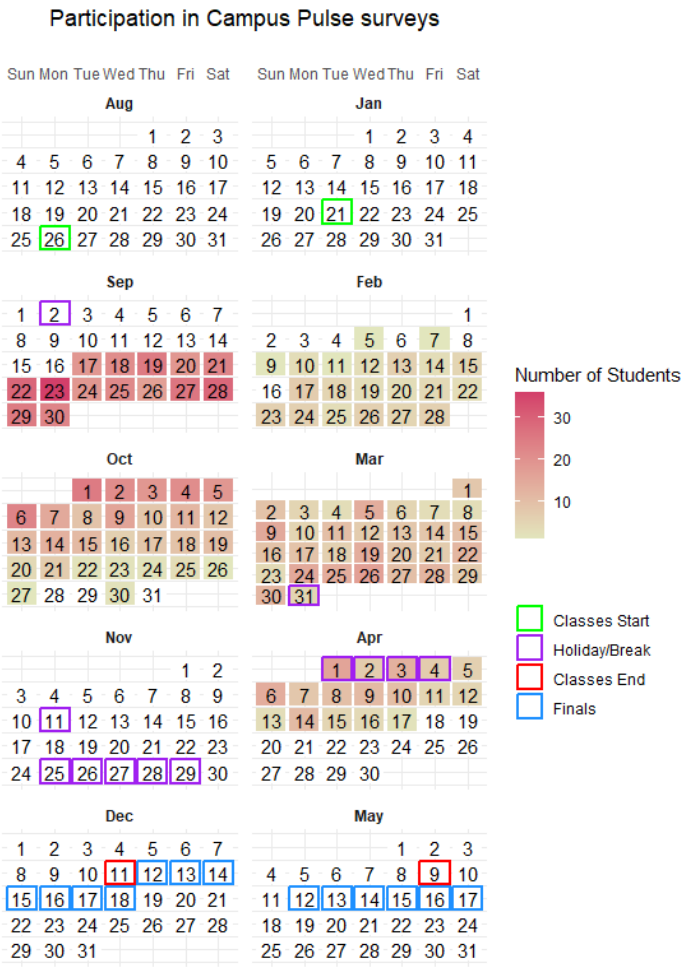


Fall saw higher survey participation than Spring; Spring had more participation outside of California

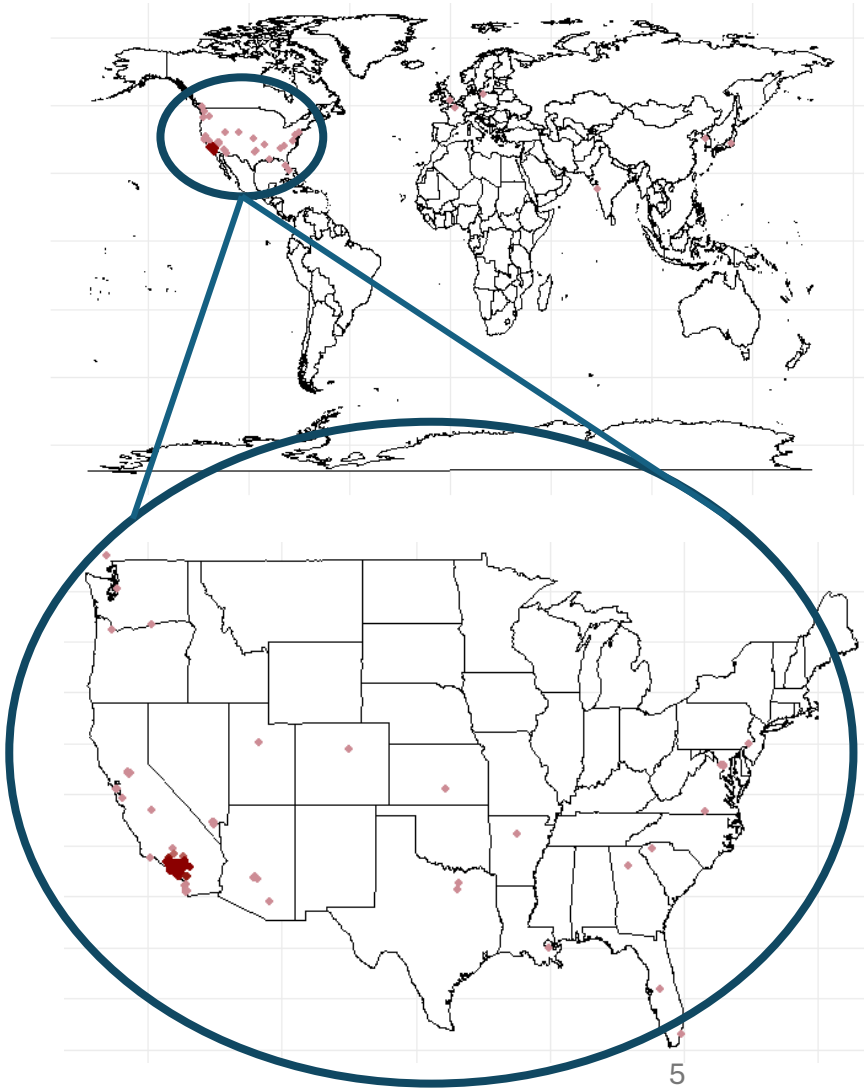
Where were participants in Fall?



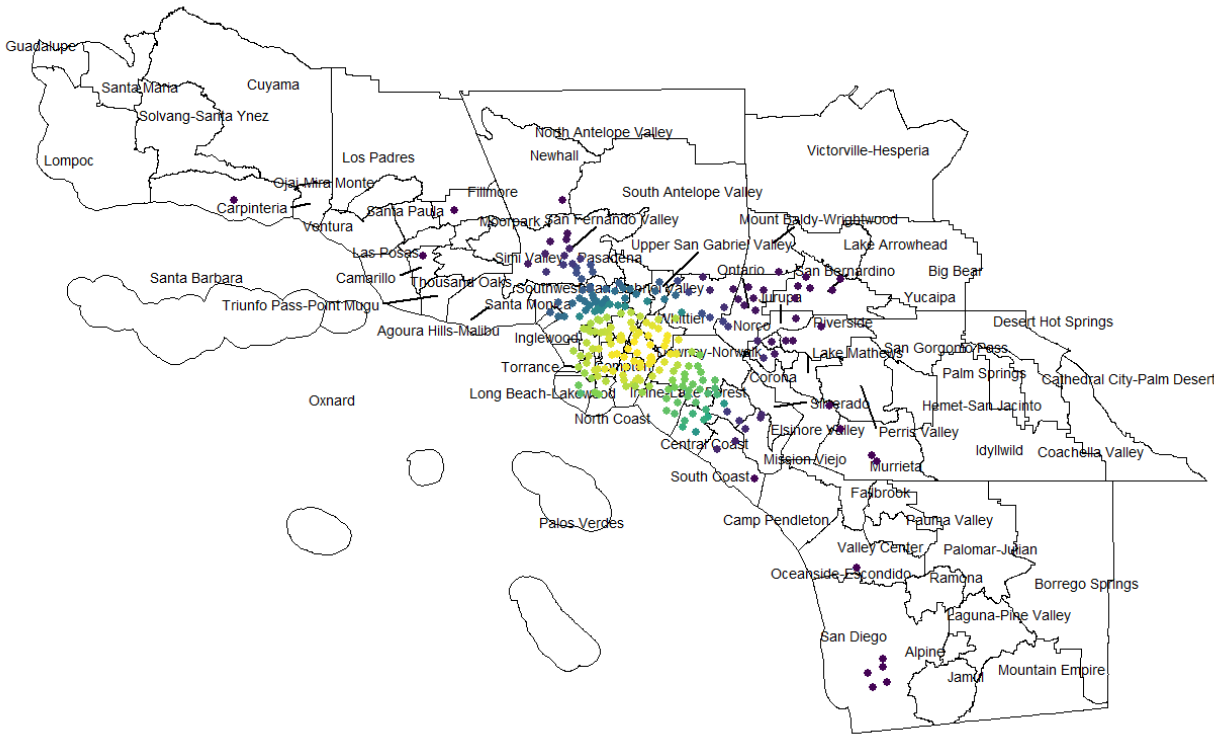
When did participants start the surveys?



Where were participants in Spring?



Fall


Guadalupe
Santa Maria
Cuyama
Solvang-Santa Ynez
Lompoc
Los Padres
North Antelope Valley
Newhall
Victorville-Hesperia
Ojai-Mira Monte
Fillmore
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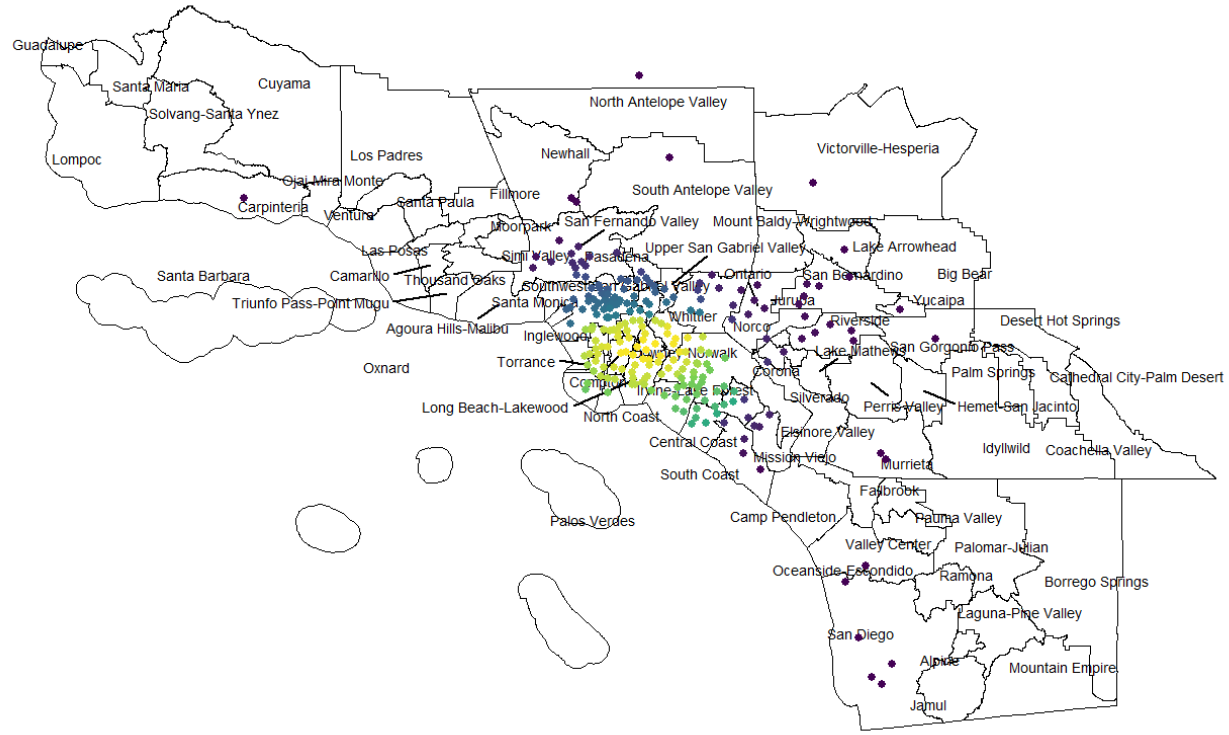
Carpinteria
Santa Paula
Ventura
Moorpark
San Fernando Valley
Mount Baldy-Wrightwood
Upper San Gabriel Valley
Lake Arrowhead
Las Posas
Simi Valley
Pasadena
Ontario
San Bernardino
Big Bear
Santa Barbara
Camarillo
Thousand Oaks
Southwest San Bernardino Valley
Jurupa
Yucaipa
Triunfo Pass-Point Mugu
Santa Monica
Whittier
Norco
Riverside
Desert Hot Springs
Agoura Hills-Malibu
Inglewood
Downey-Norwalk
Lake Matheny
San Gorgonio Pass
Torrance
Compton
Corona
Palm Springs
Cathedral City-Palm Desert
Long Beach-Lakewood
Irvine-Lake Forest
Silverado
Hemet-San Jacinto
Oxnard
North Coast
Elsinore Valley
Perris Valley
Central Coast
Mission Viejo
Idyllwild
Coachella Valley
Murrieta
South Coast
Fallbrook
Palos Verdes
Camp Pendleton
Pauma Valley
Valley Center
Palomar-Julian
Oceanside-Escondido
Ramona
Borrego Springs
Laguna-Pine Valley
San Diego
Alpine
Jamul
Mountain Empire

Spring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Alpine
Mountain Empire
Jamul

Background & Purpose

We are interested in how respondents self-rated their wellness for:

1. Mental Health
2. Physical Health
3. Social Health

} Negative-like answers give respondents the option to voice specific concerns

Responses are based on 5-point Likert Scale:

(Q1-Q3):

Very bad	Bad	Neither good nor bad	Good	Very good

Methods

Calculating Values:

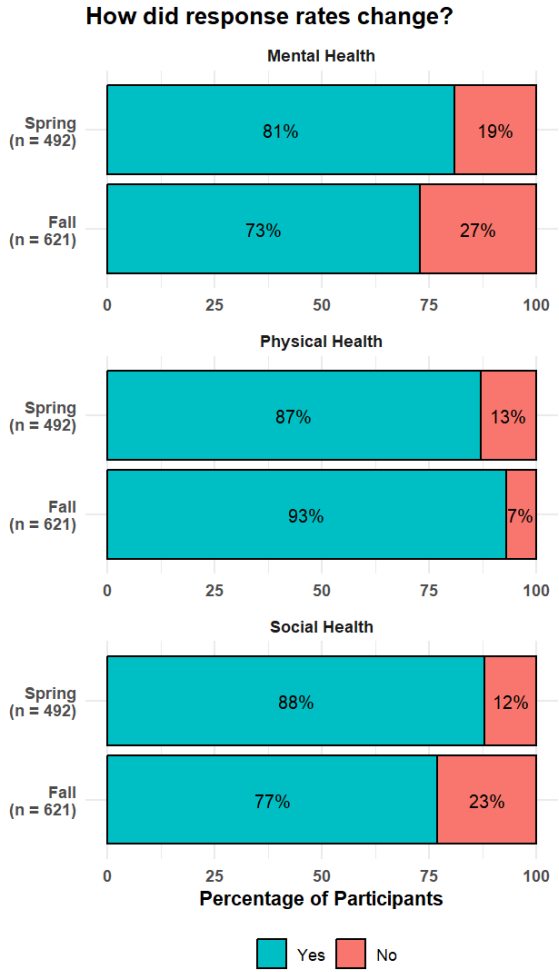
- Ignore missing values (NA)

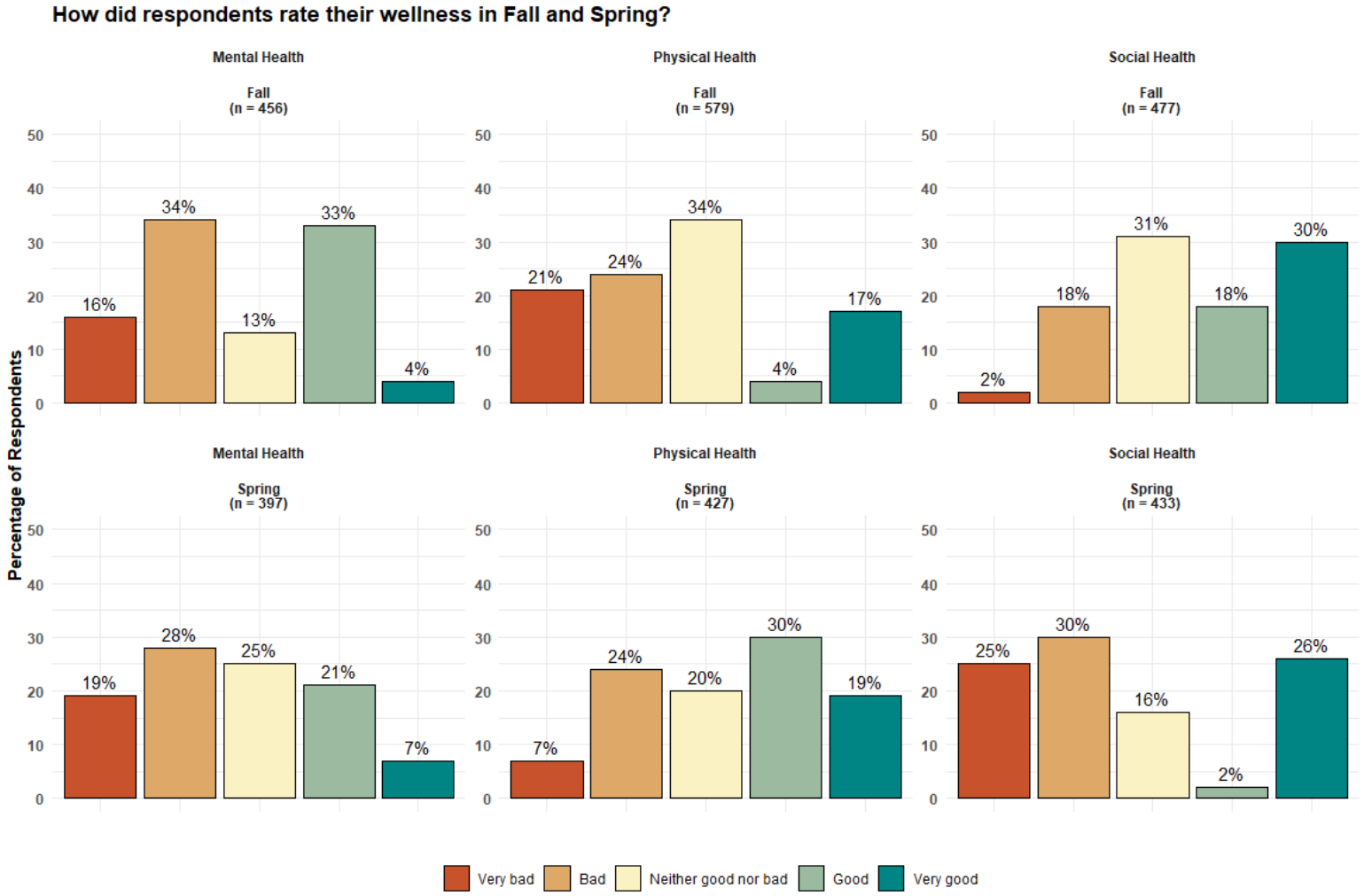
<u>Example</u>

- Question has responses: A, B
- 100 participants, 90 respondents
- 40 respond A, 50 respond B
- A: 40/90, B: 50/90

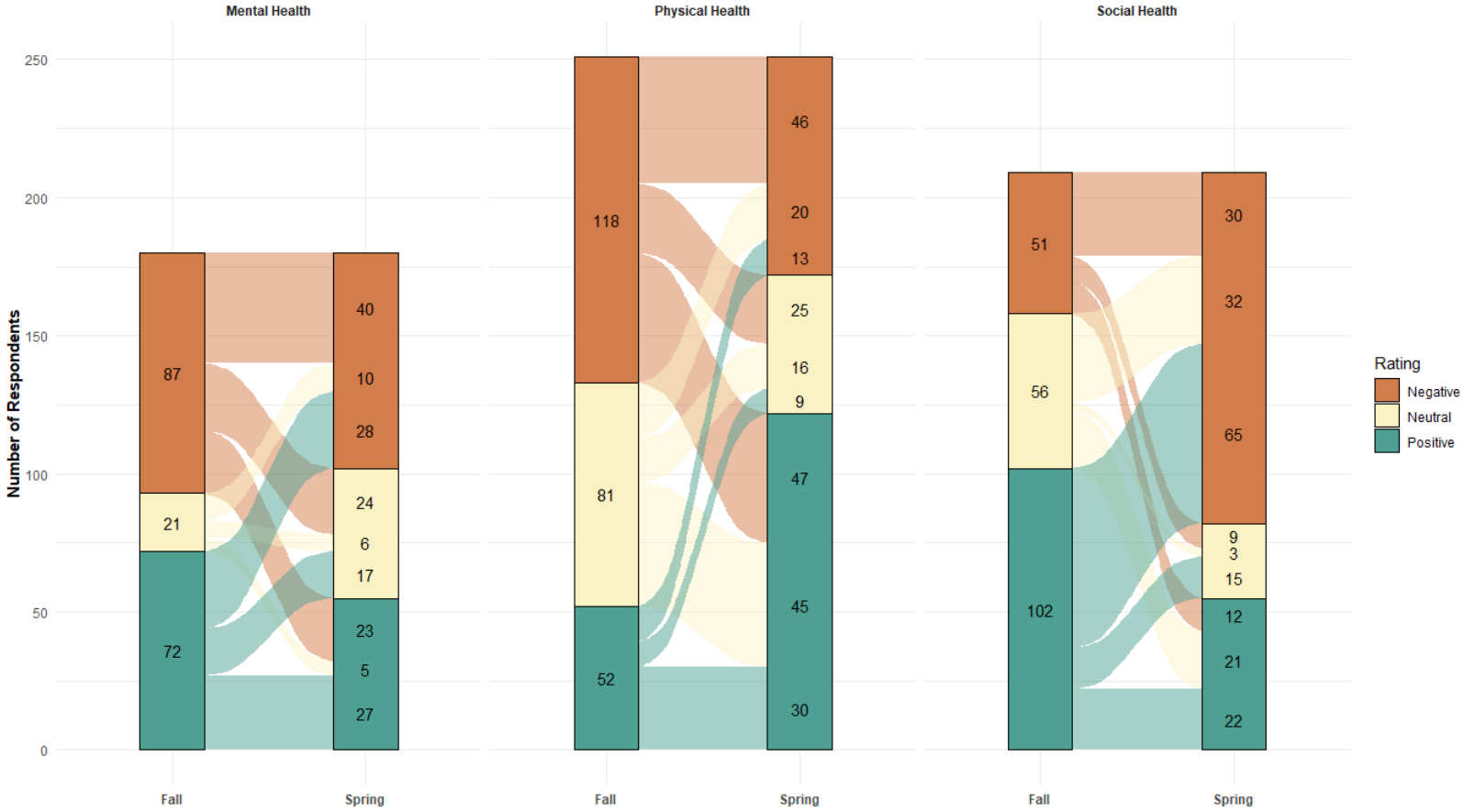
Variable	Responses	Coded	
Mental Health **Physical Health** **Social Health**	Very bad Bad	1 2	Negative
	Neither good nor bad	3	Neutral
	Good Very good	4 5	Positive
	NA	NA	NA

Fall versus Spring: Response rates and distributions





For those who responded in both surveys, how did responses change?



Example

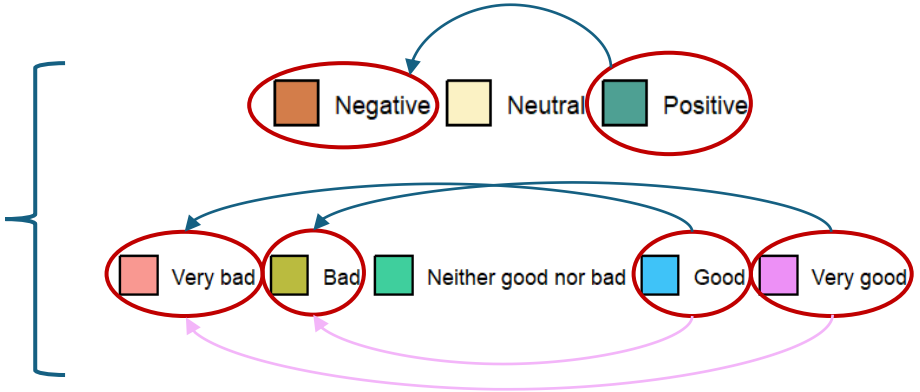
In **Fall**, 72 respondents reported **positive mental health**

In **Spring**, 28 out of the 72 reported **negative mental health**

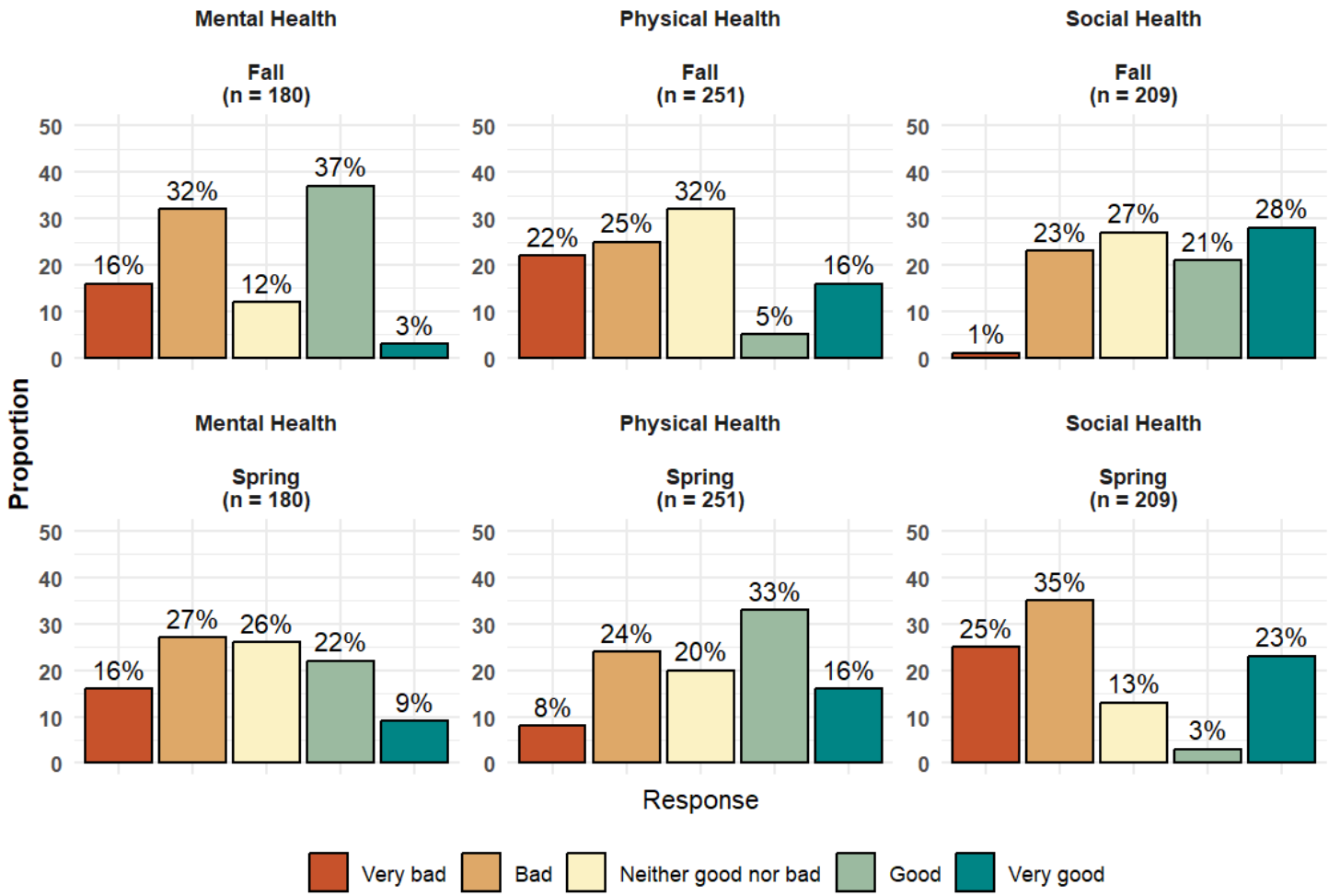
Reminder

Responses are merged so we will need to discern “extreme” changes

These are equivalent

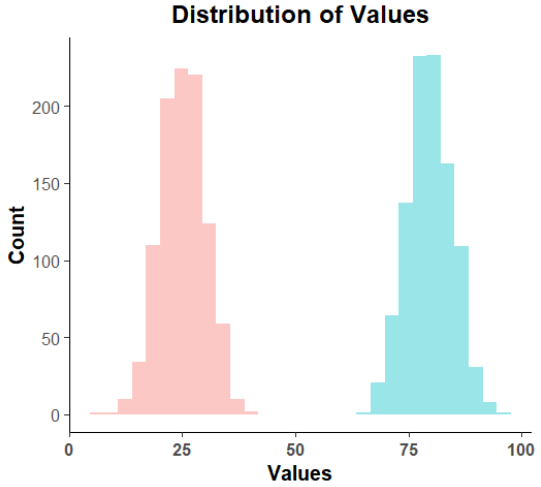


For those who responded in both surveys, is there a difference in responses?



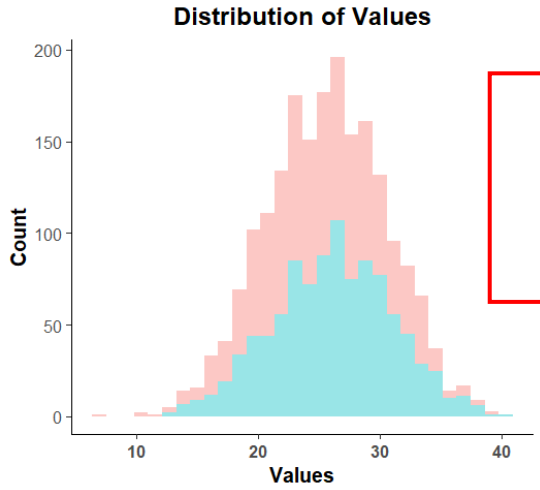
How?

Visually



...Sometimes easy to tell!

There is a difference between means



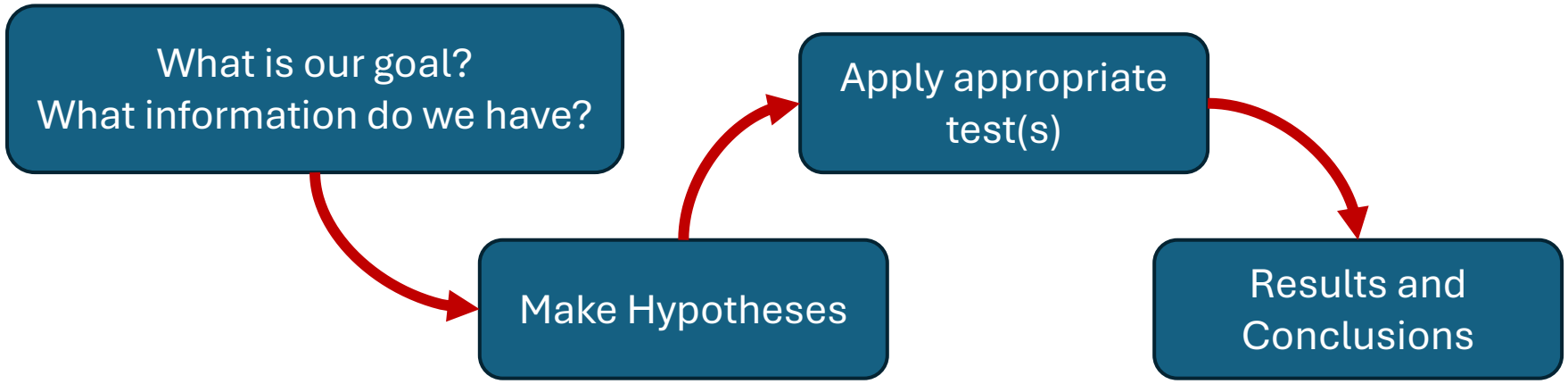
Other times, not as obvious...

Are these means different?

Reminder
Statistically significant
≠
Significant

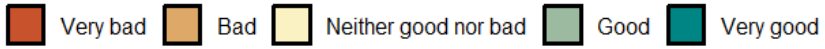
Statistics

We can use statistical methods to draw conclusions and support findings

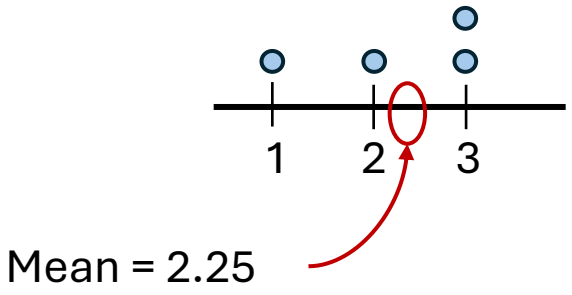


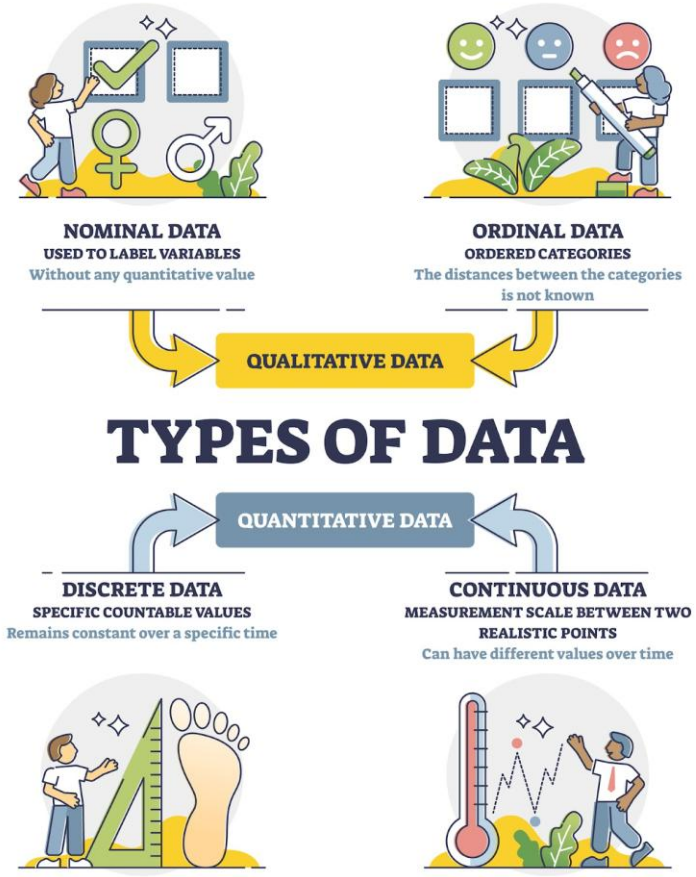
Statistics: A Brief Dive

- Survey responses are **ordinal**

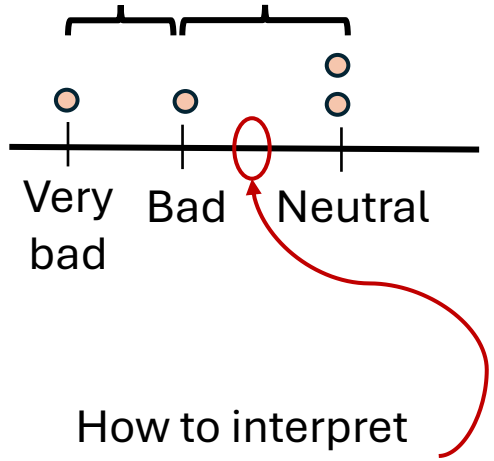


  - Categorical + Ranking + Unknown intervals
- We can assign numeric values to categories
  - But intervals are not fixed





Intervals are subjective
How to measure?



How to interpret this “mean”?

Image retrieved from: Nominal vs Ordinal data: What's the difference for precise analysis? - Formaloo

Statistics: A Brief Dive

This is the non-parametric equivalent to the t-test

Instead of comparing **mean** values, we may look at the **median** value.

Middle of a ranked dataset

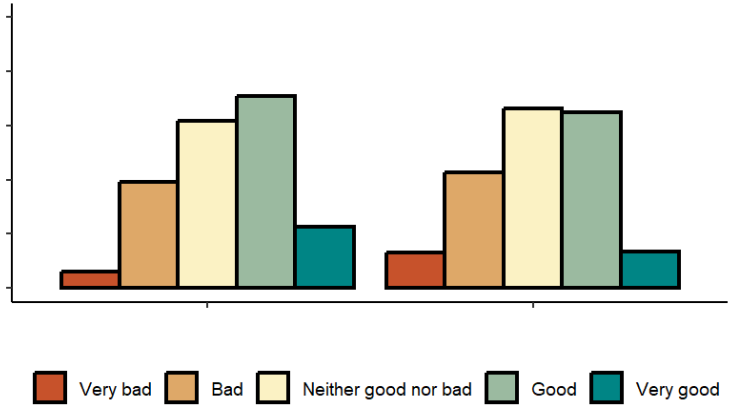
1. **Usefulness:**
   - Our values have a natural rank
   - Median depends on order, not on differences of values
2. **We want to know:**
   - In terms of central tendency, are responses in the Spring different from responses in the Fall?

Two-sided test

3. **We formally state:**

   Paired
   - H_0: The distribution of differences between paired observations is symmetric around zero.
   - H_1: The distributions of differences between paired observations is symmetric around a non-zero value.
4. **Conclude:**
   - The data **shows** that both groups are different, if results are **significant**

   or
   - The data **does not show** that both groups are different, if results are **not significant**



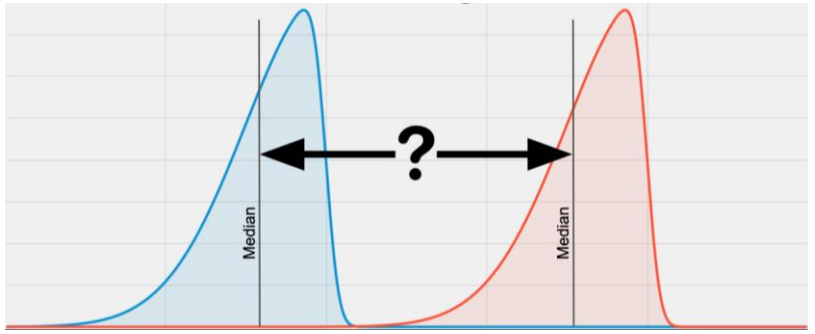
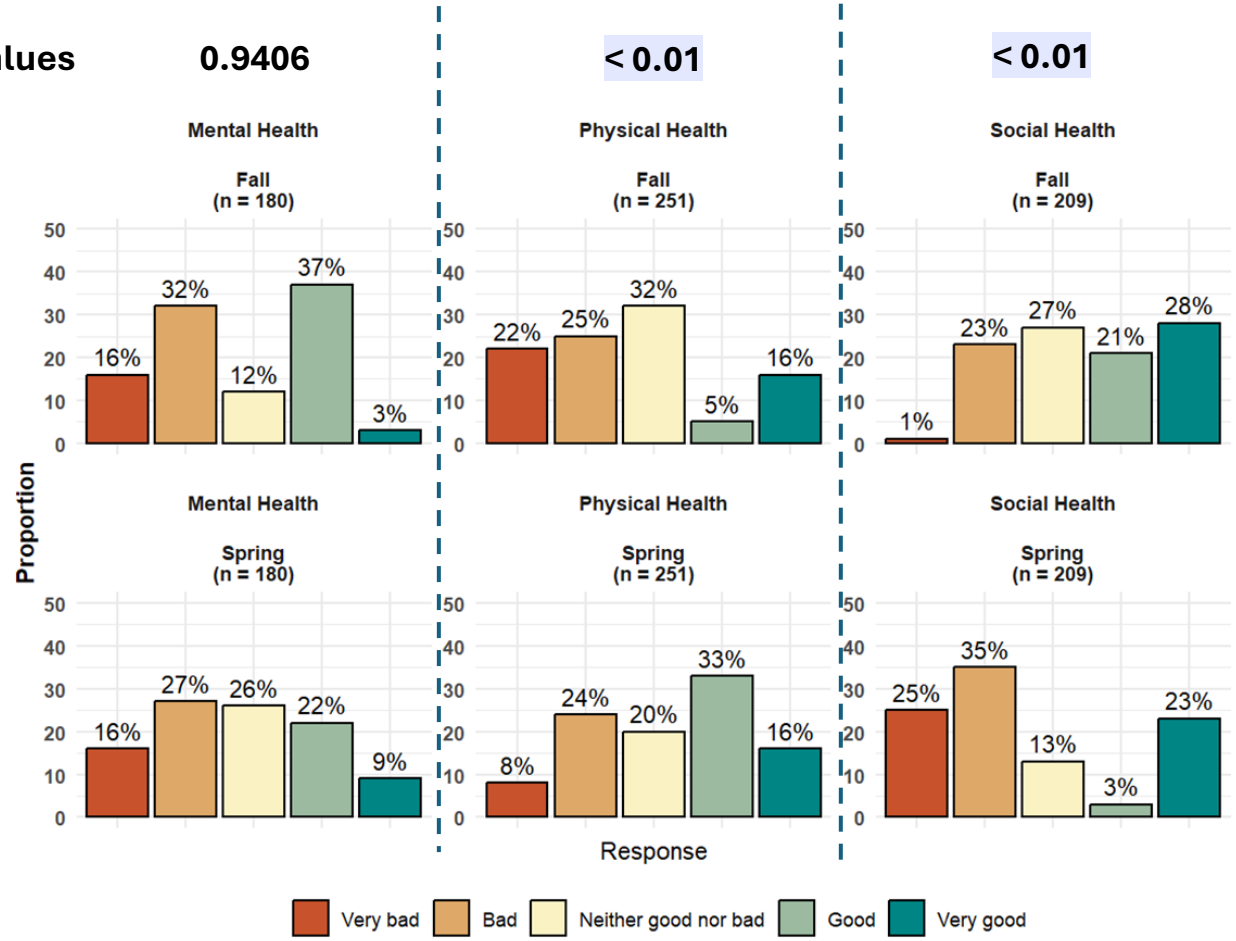


Image retrieved from: Mann-Whitney U Test - StatsTest.com

Definition

Significant: $p < 0.05$

Results




```
> wilcox.test(mental.24,mental.25,alternative = "two.sided",paired = TRUE)

        Wilcoxon signed rank test with continuity correction

data:  mental.24 and mental.25
V = 4624, p-value = 0.9406
alternative hypothesis: true location shift is not equal to 0

> wilcox.test(physical.24,physical.25,alternative = "two.sided",paired = TRUE)

        Wilcoxon signed rank test with continuity correction

data:  physical.24 and physical.25
V = 5272, p-value = 1.254e-07
alternative hypothesis: true location shift is not equal to 0

> wilcox.test(social.24,social.25,alternative = "two.sided",paired = TRUE)

        Wilcoxon signed rank test with continuity correction

data:  social.24 and social.25
V = 11646, p-value = 8.233e-09
alternative hypothesis: true location shift is not equal to 0
```

Informally, we can say that:

- For those who participated in both surveys and provided responses both times, physical health and social health ratings were different.

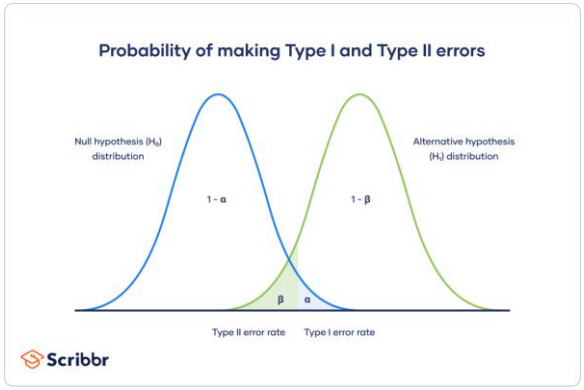


Image retrieved from: Type I & Type II Errors | Differences, Examples, Visualizations