

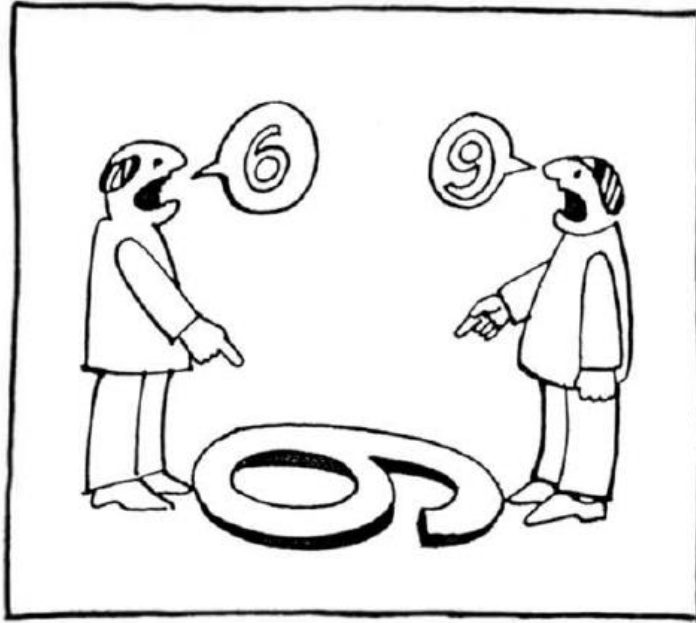
# AN ACTIVE CARING APPROACH THROUGH PSYCHOLOGICAL SAFETY IN CONSTRUCTION PROJECTS

## IGLC 2019

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# Why Psychological Safety in Construction?



What we see depends on our perspective  
&  
We act based on what we see (our beliefs)

**BLS: 20% of fatalities are in construction +  
People reluctant to ask for help + unwillingness to  
raise concerns for fear of a sanction or shame.**



## Psychological Safety:

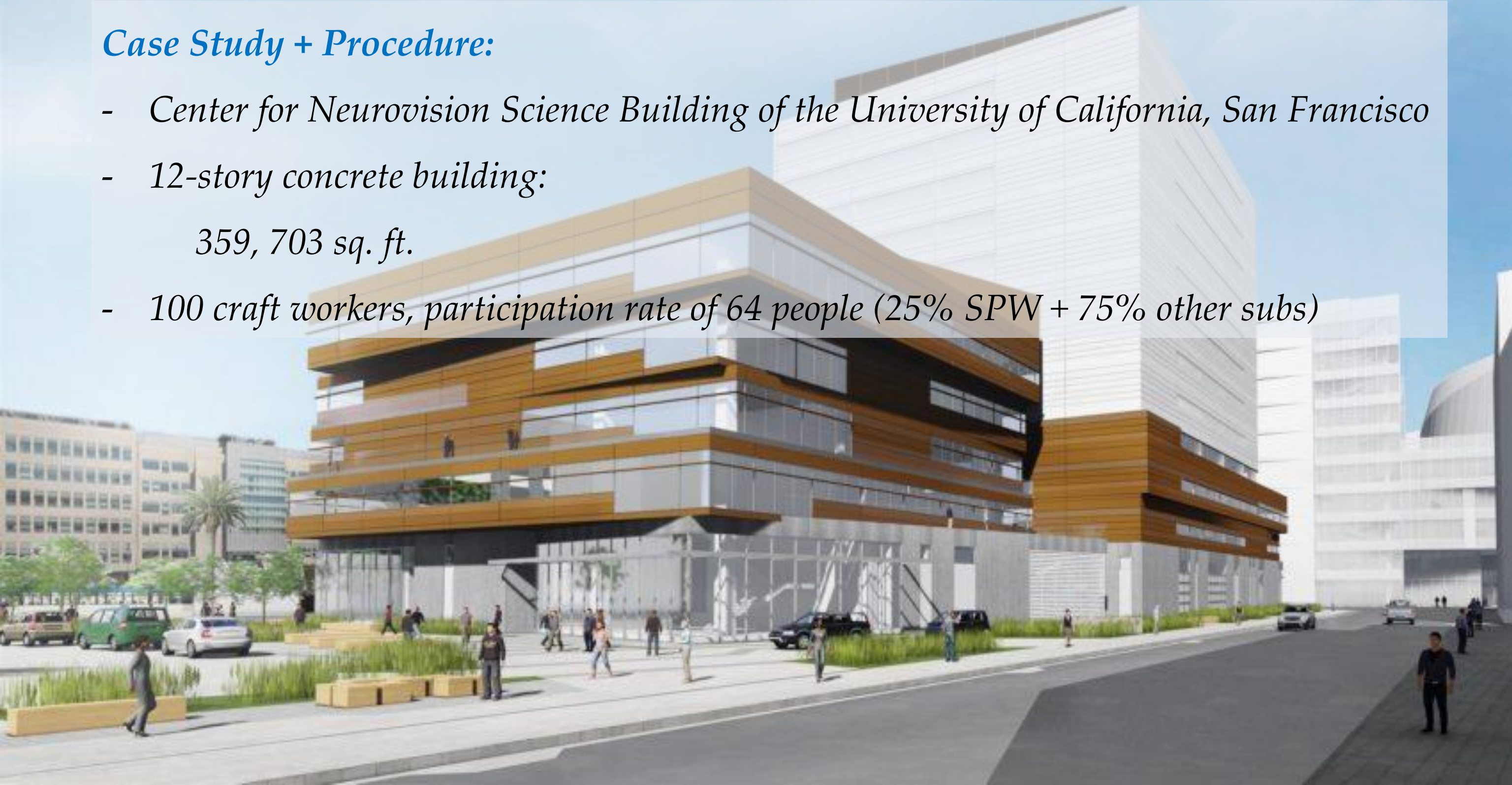
- **Worked** in healthcare, manufacturing, technology
- Opens learning behaviors: Continuous improvement
- Influences people's behaviors: allows openness regarding expectations and limitations


- Confident about asking questions & get clarity on the work
- Speaking up when errors occur
- Expressing concerns
- Provide feedback on processes
- Avoid getting into hazardous conditions



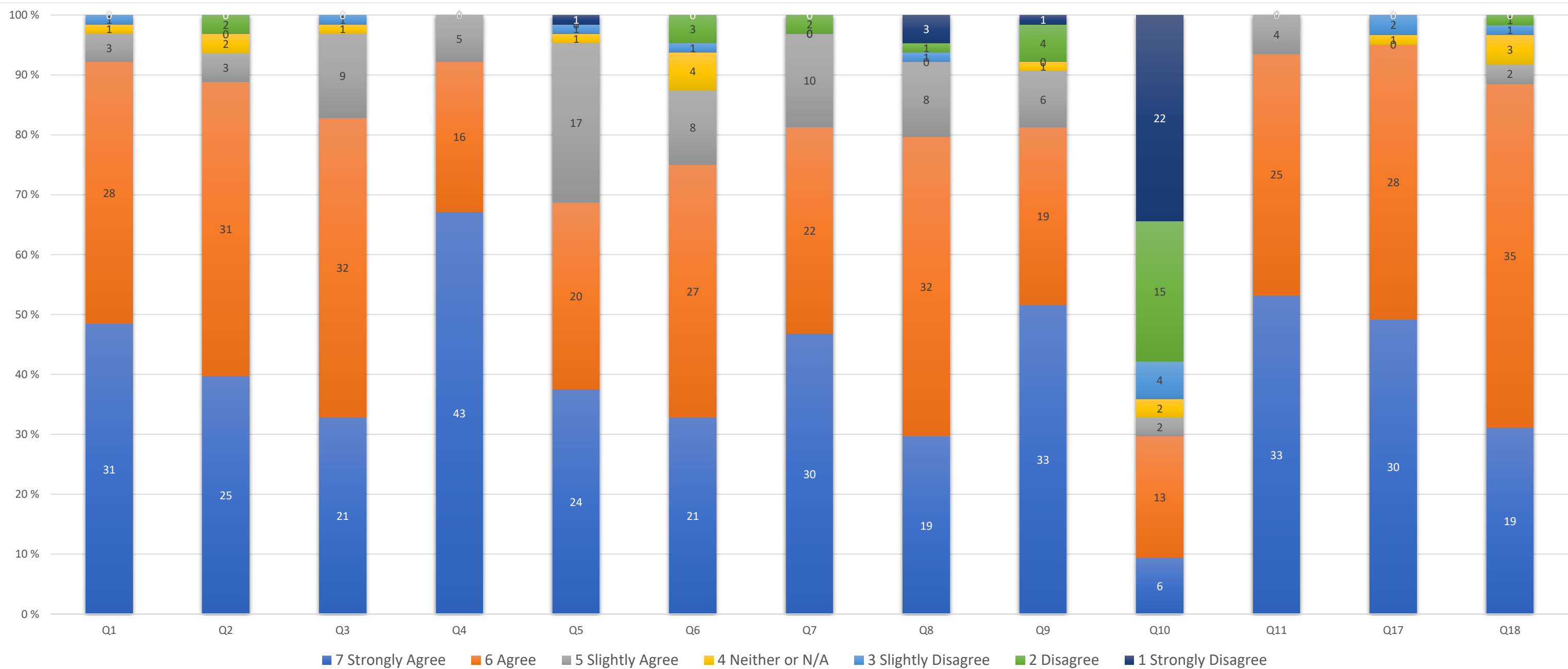
## *Case Study + Procedure:*

- *Center for Neurovision Science Building of the University of California, San Francisco*
- *12-story concrete building:*  
*359, 703 sq. ft.*
- *100 craft workers, participation rate of 64 people (25% SPW + 75% other subs)*

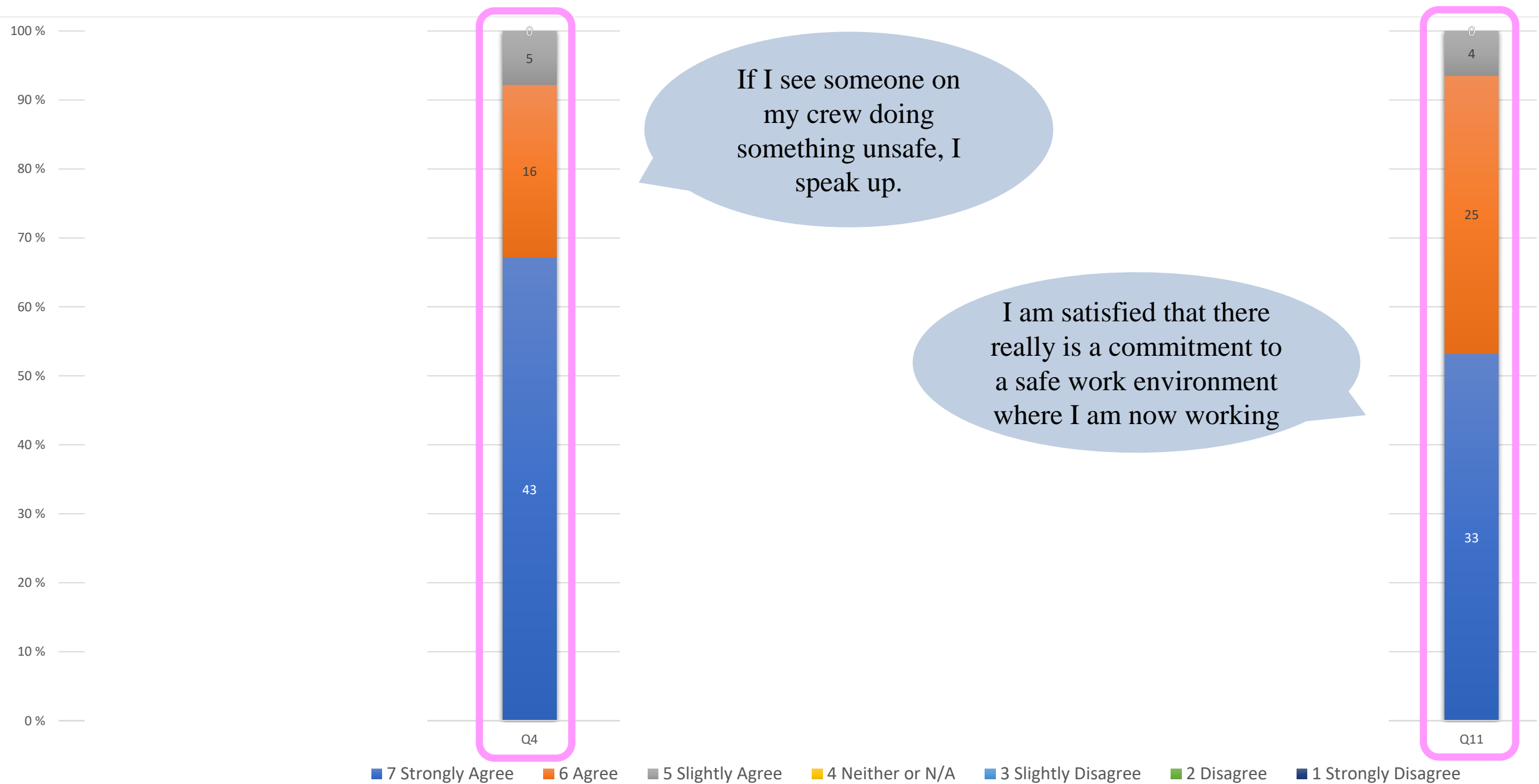


Q ID	Statement as Written	
1	I'm always learning new skills working with this crew.	<div>  </div> <div>64 participants</div> <div>           Civil            Carpenter            Mechanical            Electrical            Plumbing            Labor            Drywall            Fire sprinkler            Roofing            Iron worker            Water proofing         </div>
2	If I make a mistake, my co-workers in the crew help me learn how to do the work correctly.	
3	My co-workers in the crew are willing to listen to my ideas for improving how work is done.	
4	If I see someone on my crew doing something unsafe, I speak up.	
5	If I see someone on another crew doing something unsafe, I speak up.	
6	My direct supervisor is willing to listen to my ideas for improving how work is done.	
7	I feel comfortable talking to my direct supervisor about my safety concerns at work.	
8	My direct supervisor is understanding and helpful when I make a mistake at work.	
9	My direct supervisor is a good role model for safety.	
10	If I make a mistake, my co-workers do not teach me how to avoid making that same mistake again.	
11	I am satisfied that there really is a commitment to a safe work environment where I am now working	
17	I feel comfortable and confident in reporting near misses on the project	
18	I participate in designing the operations of the activities I am going to execute on site and I feel safe about how we execute them	3

# Research Findings – Survey Outcomes



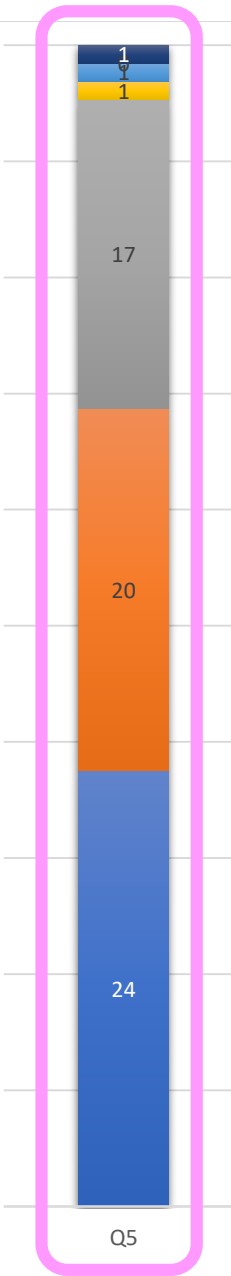
# Research Findings – Survey Outcomes





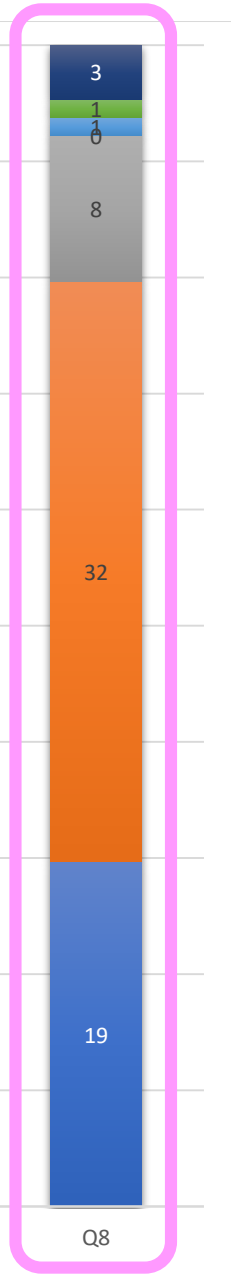
# Research Findings – Survey Outcomes

If I see someone on another crew doing something unsafe, I speak up.



Q5

My direct supervisor is understanding and helpful when I make a mistake at work.

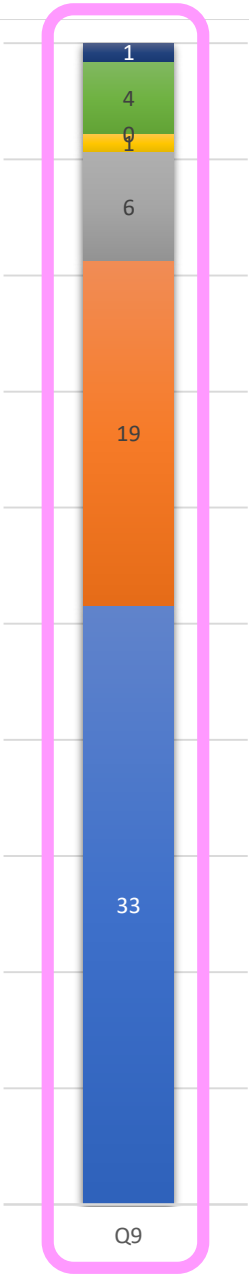


Q8

7 Strongly Agree 6 Agree 5 Slightly Agree 4 Neither or N/A 3 Slightly Disagree 2 Disagree 1 Strongly Disagree

# Research Findings – Survey Outcomes

My direct supervisor is a good role model for safety.



Variability in Participants’ Perception

7 Strongly Agree 6 Agree 5 Slightly Agree 4 Neither or N/A 3 Slightly Disagree 2 Disagree 1 Strongly Disagree



# Creating a Culture with Psychological Safety

Looking Ahead for Task  
Safety Manager

What makes my  
people feel  
safe?

Understand Work Sequence  
Tasks On Time  
Knowledgeable People  
Put Safety Before Production  
Stairs Taped Off  
Safety Talks  
Guard Rails  
Danger Zones Taped Off  
Awareness Of Surroundings  
Give Space For Other Trades  
Team Work  
My Crew  
PPE 100  
Organized Job  
Double Check Rigging  
Trust  
Rules  
We Have All We Need  
Communication  
Right Tools  
Culture  
Clean Place  
Signage  
The Way We Behave

# Creating a Culture with Psychological Safety



What makes my  
people feel  
unsafe?

# Research Findings

## What did workers say? – Building a psychologically safe work site

I'm being heard and actions are taken

Not punished for speaking up

Participate in task planning and understand activities

Strength relations among trades

Relation with supervisors

Q16	Q16
More safety meetings to teach people why safety save lives	
Encourage everyone to be open minded to new ideas	
Role modeling with live examples	
One or two lunches per week per trade	
Recognition to workers at least once a month (also for labors)	
Give gift cards for recognizing desired behaviors	
Not punishment	
1 on 1 chat with my super	
Not get punished or sent to a different job	
A written guarantee of not getting fired	
Having the trust to speak up to supervisors	Having the time to speak up during safety standowns
Having the freedom to ask questions to my supervisor	
Lose shame to speak up in public	
Talk to our supervisor before doing a dangerous job	
Meet and discuss details of our activities before hand so we can be concentrated in our tasks	
Gift card	
Get to know more other workers and improve communication	
More recognition from GC to the subs equally	Build monfidence and trust that when we report, we're being heard
Talks that share experience in safety issues	
This survey helps	
Regular safety meetings per week	
Feel people should speak up regardless of incentives	
Already feel safe here	
Explain the approach that safety requires mind shift	
Action must be taken when someone speaks up, not just listening and doing nothing	
Build relationships with other trades	
Corrective action should be taken when someone speaks up	
Job site meetings	Suggestion box
Continuously remind us that we will not get in trouble	Small reward or recognition
Lose shame	
Try to increase trust with supervisors and among the team	
Work on increasing trust among the team we work with	
Increase trust that the person who is listening to me is the right one	Make sure I am being understood
Give me the trust that I will not be punished for speaking up	Not bad consecuenses when we speak up
Receiving suggestions and recommendations instead of shouting or bad words	
To have supervisors explaining the project/work scope right	
Get help to lose shame and fear	Help us to understand that we will not get into trouble with other peop
Having a good relationship with superintendent or supervisor	Feel confident with the work I put
Overcome overconfidence	
Suggestion box	
Write suggestions down on a paper without names	
Ask question to workers and look for recommendations	
Speak with the true	
Improve communication between all trades	



EXIT

# Psychological Safety – PROJECT OUTCOMES



If I see someone on my crew doing something unsafe, I speak up.

I am satisfied that there really is a commitment to a safe work environment where I am now working.



No Food  
WASTE IN  
TRASH CANS  
IN THIS ROOM

Handwritten notes on a whiteboard, including a list of items and a small diagram.

IT  
MP  
WN



Start	Stop	Continue
<ul style="list-style-type: none"> <li>• Use of English &amp; Spanish in all hands meeting on site</li> <li>• Creation of an on-site safety committee: build cohesiveness</li> <li>• Strength relations between and amongst trades</li> <li>• All staff can start giving recognitions</li> <li>• Include staff in safety walks</li> </ul>	<ul style="list-style-type: none"> <li>• Understand errors as a reason to feel fear</li> <li>• Thinking about reporting near misses as something negative</li> <li>• Acting as if the GC was the only mean for communication about trades</li> </ul>	<ul style="list-style-type: none"> <li>• Have sessions with supervisors and general foreman to discuss initiatives for increasing psychological safety</li> <li>• Reinforce recognitions program “Doing it right” campaign</li> <li>• Sharing good examples during orientations</li> </ul>

# Conclusions

**Psychological safety impacts:** team performance, quality, and safety of the project.

**Leading by example:** the way site managers and superintendents behave plays a key role in shaping craft workers' feelings and behaviors.

**Willingness to act when workers observe hazards:** it can change as humans then to care more about people they know.

**Share experiences:** when mistakes occurred in the project but did not lead to rejection, but rather there was support to solve the issue together and learn from it.

**Our own behavior influences whether others feel safe or unsafe working with us.**







Show how much you care...  
And they'll start caring about you

