Job-Site Safety Institute®

Transitioning from Hard Hats to Safety Helmets

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Problem

- Head injuries are a significant cause of fatalities and severe injuries.
- Type I Hard Hats do not offer sufficient protection
- Type II Safety Helmets offer better protection and better retention systems
- Adoption of Type II safety helmets is not widespread, particularly among vulnerable small businesses

Job-Site Safety Institute RFP

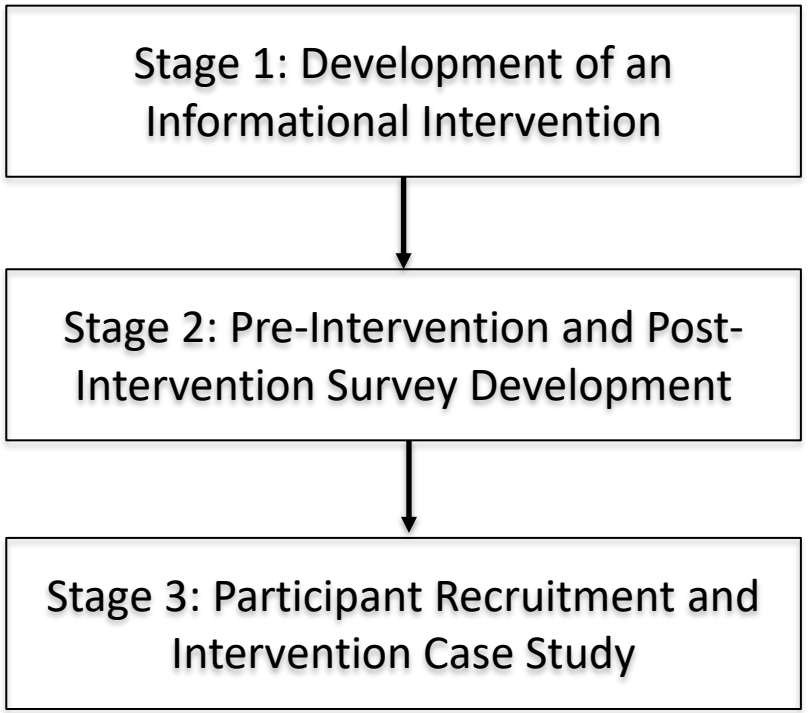
Request for Proposal (RFP): Small Business Case Study – Replacing Hard Hats with Safety Helmets in the Construction Industry

Research Question

Can a targeted intervention shift attitudes and increase willingness to adopt Type II safety helmets among construction workers?

- focus on small businesses

Research Approach



Seriousness of the issue - TBIs

Limitations of Type I hard hats

Stage 1: Development of an Informational Intervention

Real-world testimonials and Case Examples

Benefits of Type II safety helmets

Hands on Type II safety helmet familiarization

Upgrading Your Safety: Why Type II Safety Helmets Matter

Every year, over 200 construction workers die from traumatic brain injuries (TBIs) in the U.S.

– Many of these deaths could have been prevented with better head protection.

If you knew there was a helmet that could significantly reduce your risk of a serious head injury, wouldn't you want to wear it?

Limitations of Type I Hard Hats

- *Limited protection:* Only protects against top-down impacts.
- *Falls and side impacts:* No lateral protection, which is critical in falls, slips, trips, or being hit by equipment/structural members/debris.
- *Helmet falls off easily*: No chin strap, so it often falls off before impact.

Benefits of Type II Safety Helmets

- Type II safety helmets offer protection against:
  - Head injuries when workers fall (from ladders, scaffolds, and rooftops) backward, forward, or sideways and helmet stays on due to chin strap
  - Struck-by Incidents such as accidental head contact with moving machinery, swinging beams, and overhead loads
  - Struck-against incidents from low-hanging pipes, scaffolding, or overhead obstacles

Cost and Comfort

- Investing roughly an additional $50-$100 in Type II safety helmets can potentially prevent costly life-altering incidents.

- Modern Type II safety helmets are engineered with improved padding, ventilation, and adjustable fit systems to enhance comfort and safety.

- Would you rather wear a helmet that stays on and protects you fully, or take a risk with sub-optimal equipment?"

Brasfield & Gorrie Transitions to Type II Head Protection for Workers

The construction firm has adopted enhanced helmets to reduce head injury risks.

BY ROBERT YANIZ JR. | OCT 17, 2024

Brasfield & Gorrie, one of the la
fully transitioned to Type II safet

CONSTRUCTIONDIVE Deep Dive Opinion Library Events Press Releases Topics

Contractors swap hard hats for helmets

Increasing availability and better protection have made helmets the new standard f
major contractors like Clark and DPR.

Published June 29, 2023

ps

LABOR, NEWS

A hard (hat) goodbye: Wisconsin construction firm adopts new helmets to improve safety

The helmets manufactured by Milwaukee Tool and used by the Boldt Company are designed to stay on the head all day, even when switching tasks

BY AVERY LEA ROGERS • APRIL 3, 2024 • UPDATED APRIL 8, 2024 at 10:49 AM

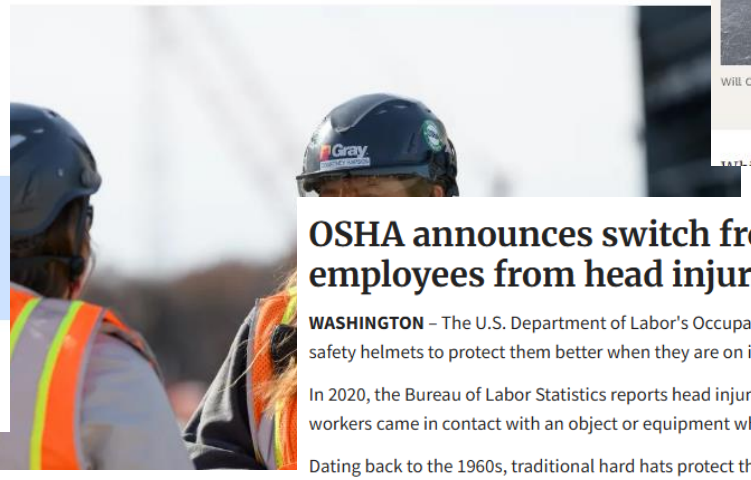
Listen

Will Cummings, a journeyman ironworker and welding foreman at The Boldt Company, wears one of the new safety helmets. *Photo courtesy of The Boldt Company*

Clark to Require Trade Contractors to Switch from Hard Hats to Safety Helmets

May 2, 2022

Bethesda, MD – Today, Clark Construction Group announced that it will require all craft workers to wear safety helmets that meet certain performance standards and that are equipped with an integrated four-point chin strap on all new projects starting on August 1, 2022. This requirement further solidifies the company's commitment to ensuring enhanced head protection for workers on its jobsites. Clark is the first general contractor



OSHA announces switch from traditional hard hats to safety helmets to protect agency employees from head injuries better

WASHINGTON – The U.S. Department of Labor's Occupational Safety and Health Administration announced that the agency is replacing traditional hard hats used by its employees w safety helmets to protect them better when they are on inspection sites.

In 2020, the Bureau of Labor Statistics reports head injuries accounted for nearly 6 percent of non-fatal occupational injuries involving days away from work. Almost half of those injur workers came in contact with an object or equipment while about 20 percent were caused by slips, trips and falls.

Dating back to the 1960s, traditional hard hats protect the top of a worker's head but have minimal side impact protection and also lack chin straps. Without the straps, tradition hard worker's head if they slip or trip, leaving them unprotected. In addition, traditional hard hats lacked vents and trapped heat inside.

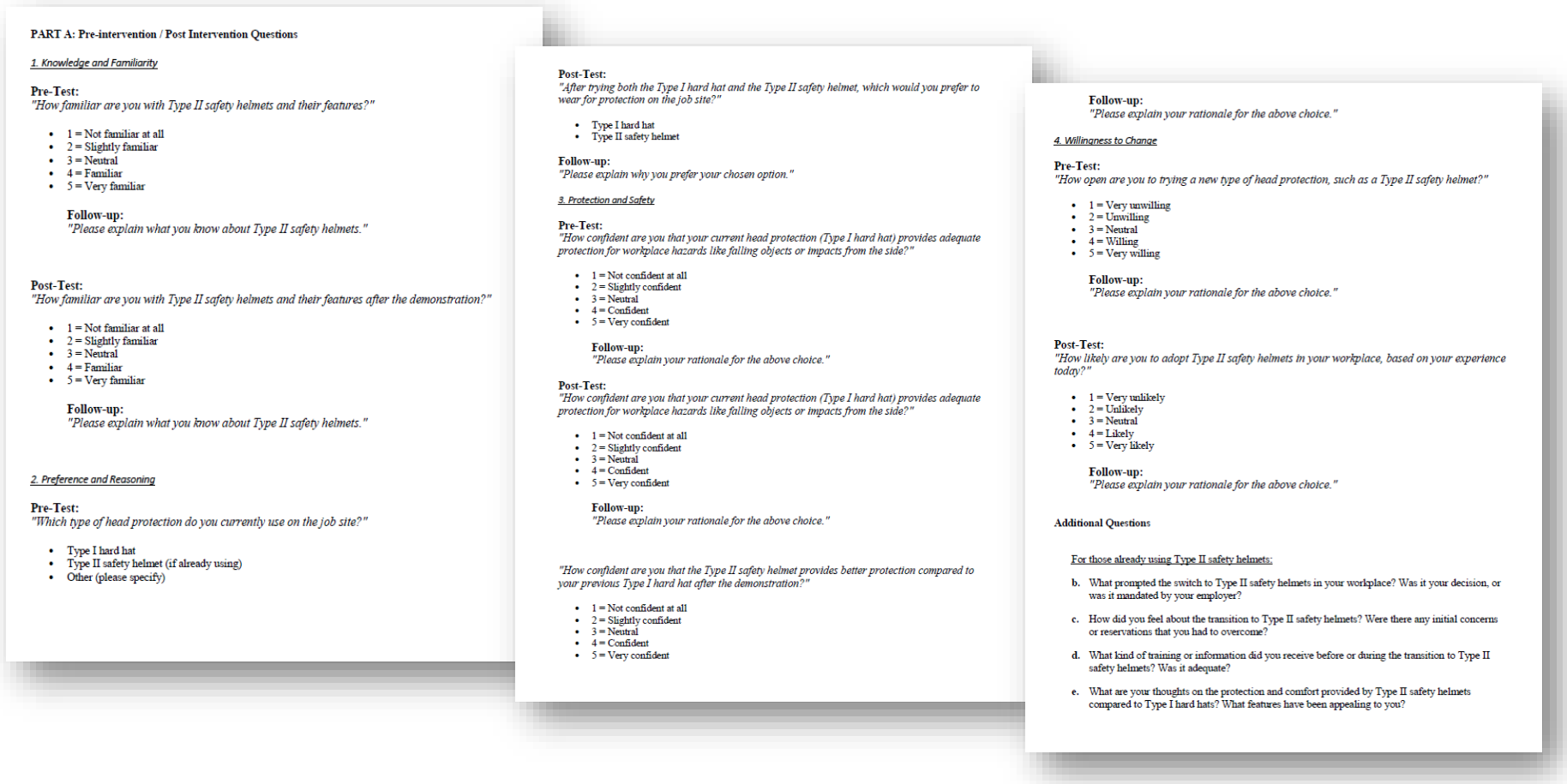
Construction Safety Week Video: Why Switch to Safety Helmets?

Hands-on session with Safety Helmets

Studson SHK-1

Kask Zenith X2

Stage 2: Pre-Intervention and Post-Intervention Survey Development



PART A: Pre-intervention / Post Intervention Questions

1. Knowledge and Familiarity

Pre-Test:
"How familiar are you with Type II safety helmets and their features?"

- 1 = Not familiar at all
- 2 = Slightly familiar
- 3 = Neutral
- 4 = Familiar
- 5 = Very familiar

Follow-up:
"Please explain what you know about Type II safety helmets."

Post-Test:
"How familiar are you with Type II safety helmets and their features after the demonstration?"

- 1 = Not familiar at all
- 2 = Slightly familiar
- 3 = Neutral
- 4 = Familiar
- 5 = Very familiar

Follow-up:
"Please explain what you know about Type II safety helmets."

2. Preference and Reasoning

Pre-Test:
"Which type of head protection do you currently use on the job site?"

- Type I hard hat
- Type II safety helmet (if already using)
- Other (please specify)

Post-Test:
"After trying both the Type I hard hat and the Type II safety helmet, which would you prefer to wear for protection on the job site?"

- Type I hard hat
- Type II safety helmet

Follow-up:
"Please explain why you prefer your chosen option."

3. Protection and Safety

Pre-Test:
"How confident are you that your current head protection (Type I hard hat) provides adequate protection for workplace hazards like falling objects or impacts from the side?"

- 1 = Not confident at all
- 2 = Slightly confident
- 3 = Neutral
- 4 = Confident
- 5 = Very confident

Follow-up:
"Please explain your rationale for the above choice."

Post-Test:
"How confident are you that your current head protection (Type I hard hat) provides adequate protection for workplace hazards like falling objects or impacts from the side?"

- 1 = Not confident at all
- 2 = Slightly confident
- 3 = Neutral
- 4 = Confident
- 5 = Very confident

Follow-up:
"Please explain your rationale for the above choice."

"How confident are you that the Type II safety helmet provides better protection compared to your previous Type I hard hat after the demonstration?"

- 1 = Not confident at all
- 2 = Slightly confident
- 3 = Neutral
- 4 = Confident
- 5 = Very confident

Follow-up:
"Please explain your rationale for the above choice."

4. Willingness to Change

Pre-Test:
"How open are you to trying a new type of head protection, such as a Type II safety helmet?"

- 1 = Very unwilling
- 2 = Unwilling
- 3 = Neutral
- 4 = Willing
- 5 = Very willing

Follow-up:
"Please explain your rationale for the above choice."

Post-Test:
"How likely are you to adopt Type II safety helmets in your workplace, based on your experience today?"

- 1 = Very unlikely
- 2 = Unlikely
- 3 = Neutral
- 4 = Likely
- 5 = Very likely

Follow-up:
"Please explain your rationale for the above choice."

Additional Questions

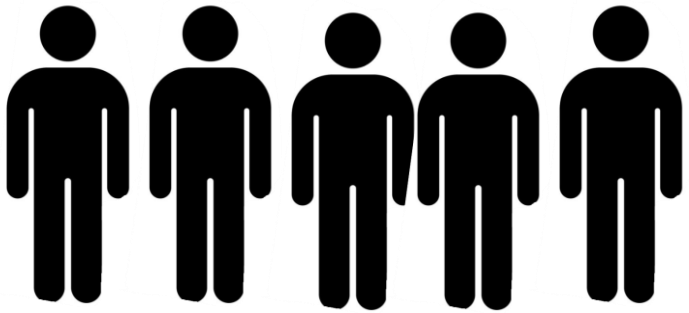
For those already using Type II safety helmets:

b. What prompted the switch to Type II safety helmets in your workplace? Was it your decision, or was it mandated by your employer?

c. How did you feel about the transition to Type II safety helmets? Were there any initial concerns or reservations that you had to overcome?

d. What kind of training or information did you receive before or during the transition to Type II safety helmets? Was it adequate?

e. What are your thoughts on the protection and comfort provided by Type II safety helmets compared to Type I hard hats? What features have been appealing to you?



Stage 3: Participant Recruitment and Intervention Case Study

Studson SHK-1

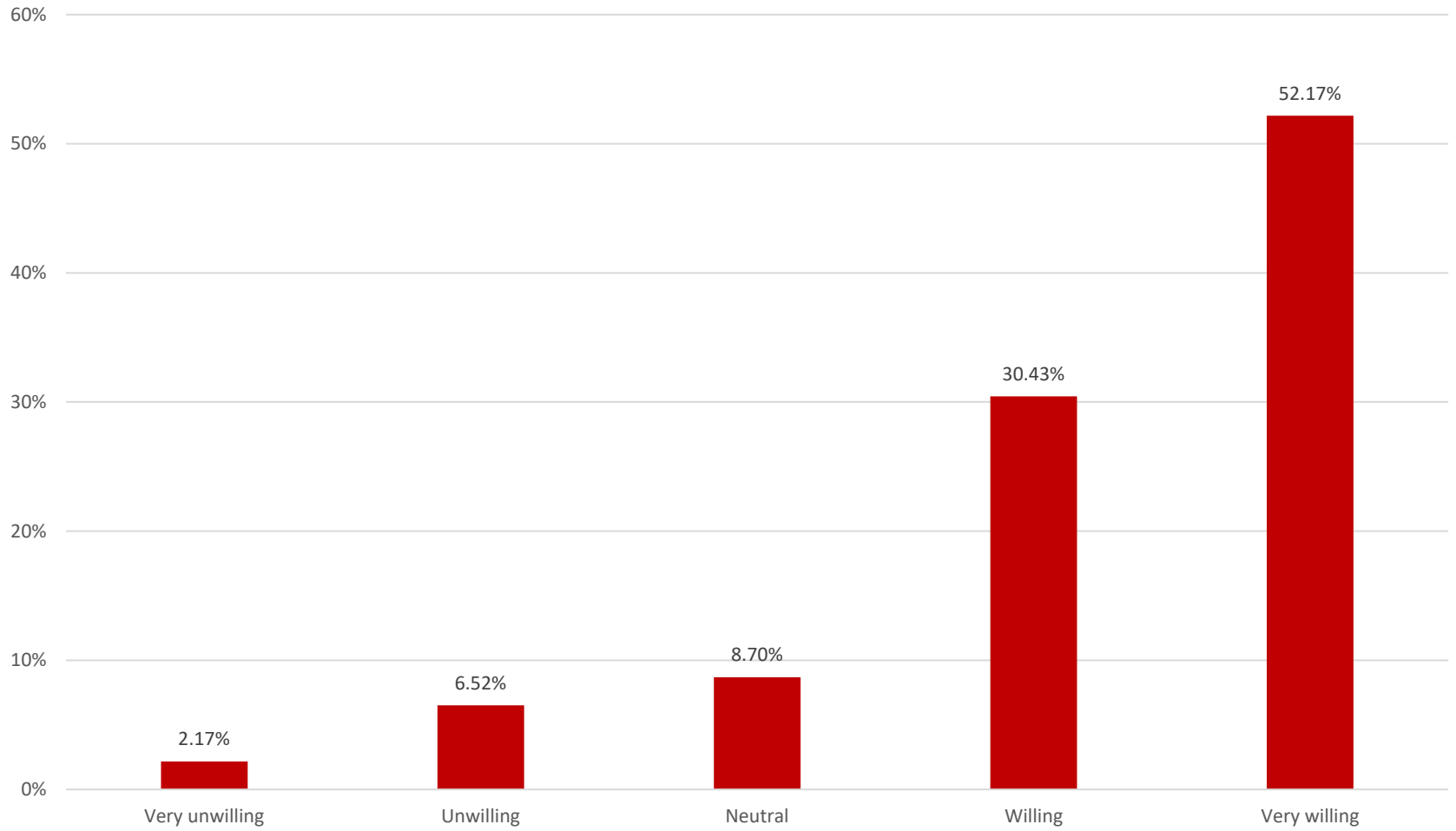
46 Participants:

Electricians
Plumbers
Structural framers
Carpenters
HVAC installers
Painters
Roofers
Drywall installers
Landscapers
Concrete workers
Site supervisors
Field engineer

Experience Range: 2 to 22 years

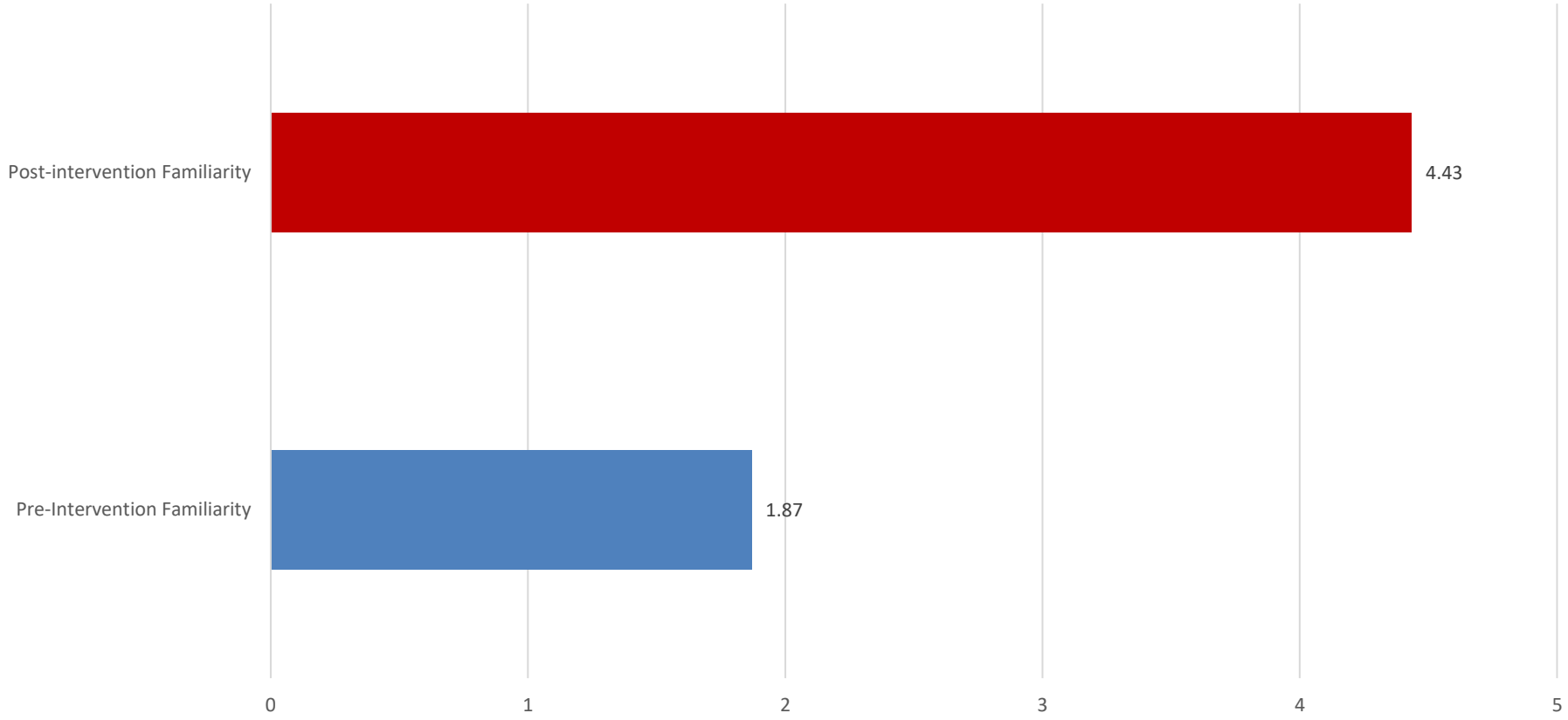
Kask Zenith X2

Openness to trying alternate head protection that may offer superior protection (e.g., Type II safety helmets)

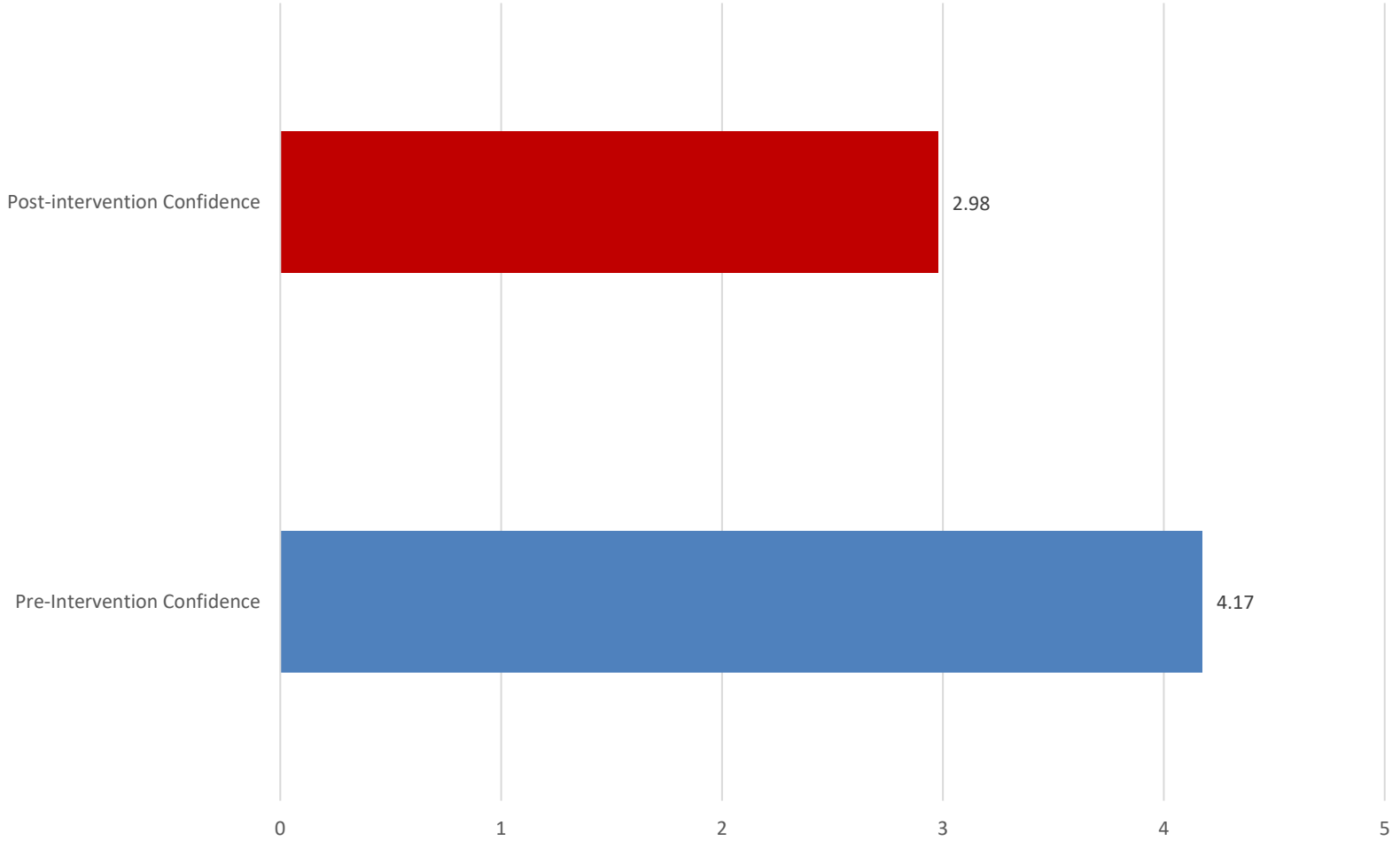


Over 80% of participants were open to consider alternatives

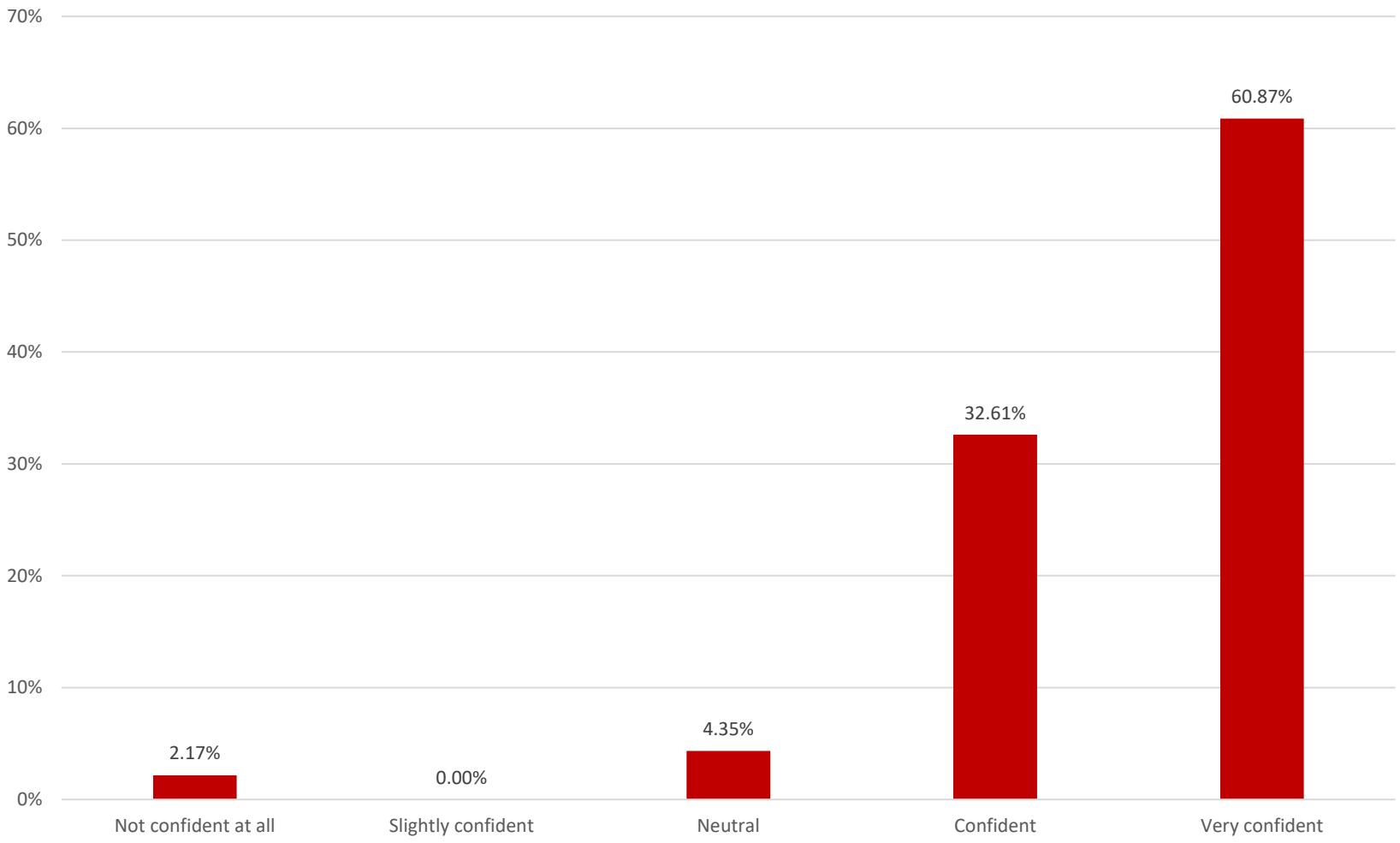
Change in Familiarity with Type II Safety Helmets



Change in Confidence with Type I Hard Hats

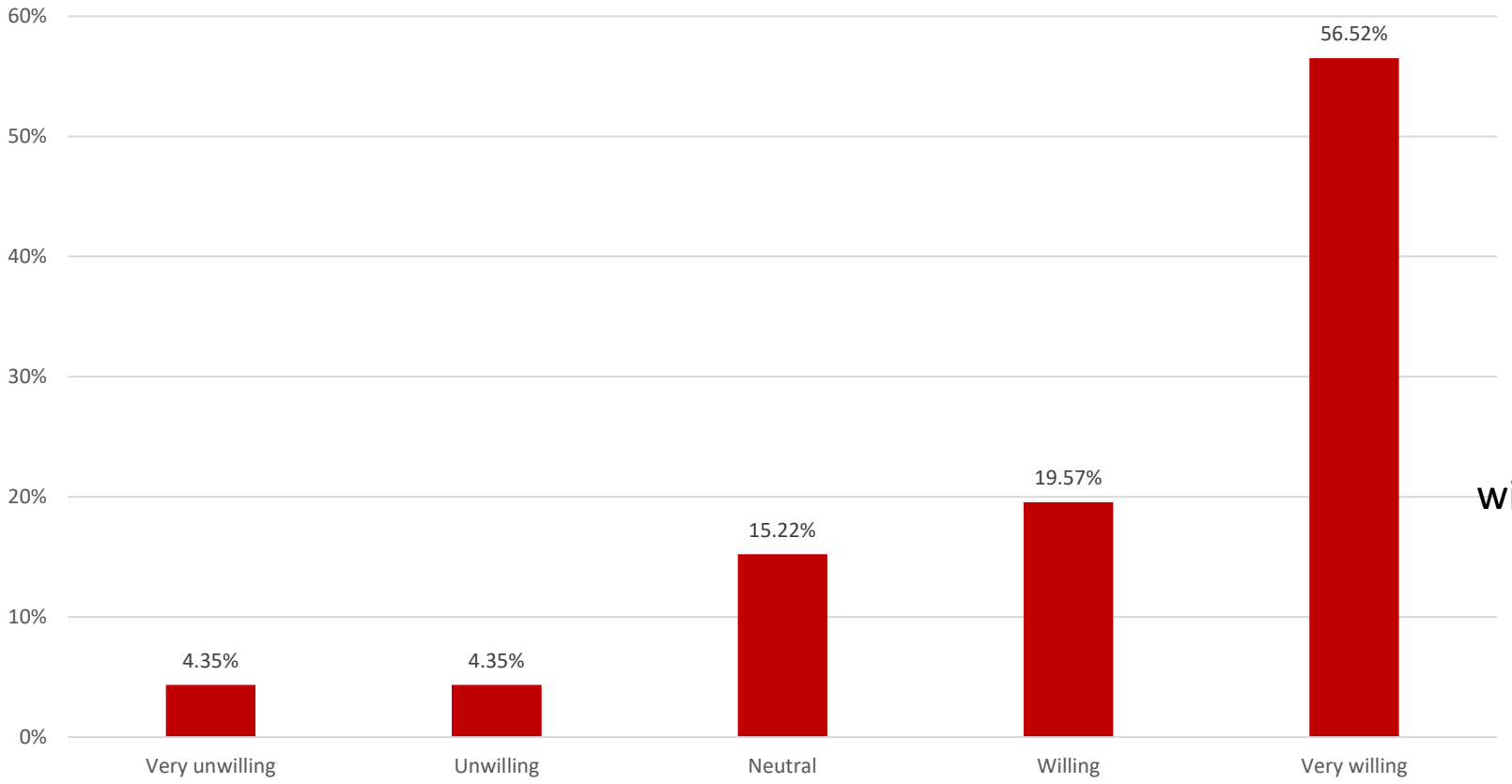


Confidence with Type II safety helmets compared to Type I (Post-intervention)



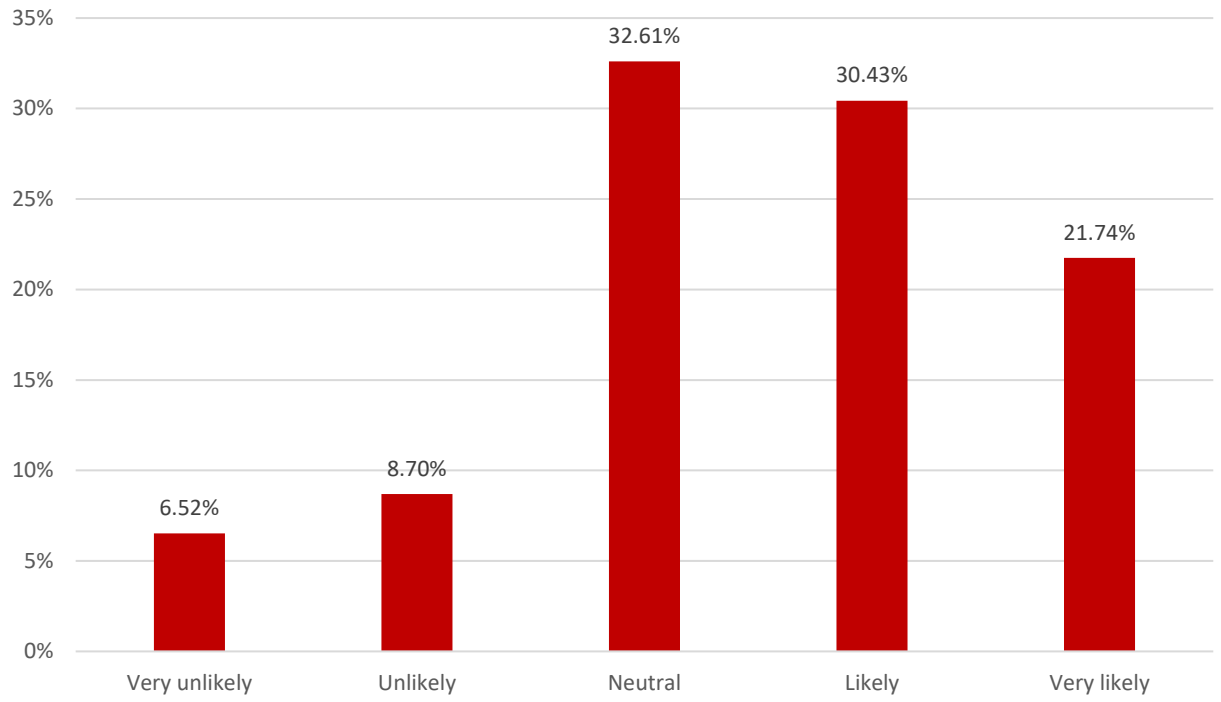
Over 92% of participants were confident or very confident that Type II safety helmets offer superior protection

Willingness to adopt Type II safety helmets after intervention (Post-intervention)



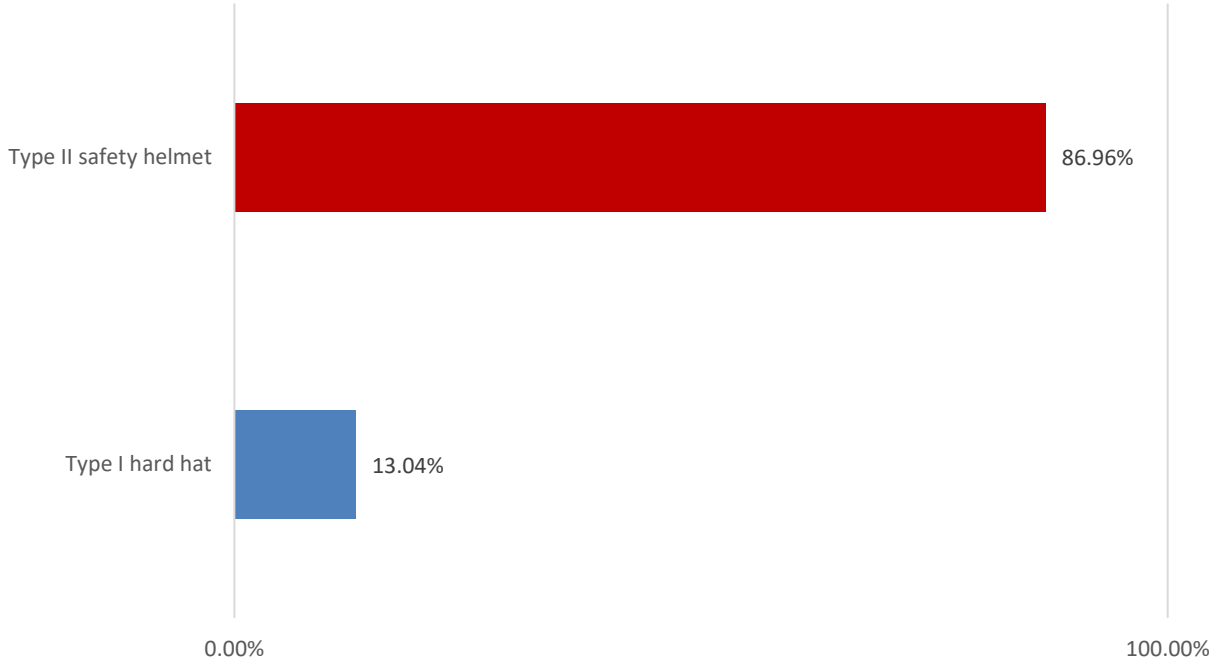
Over 75% of participants were willing or very willing to switch.

Likelihood of adopting Type II safety helmets in the next six months considering barriers and challenges



Only 52% of participants were likely to switch in the next 6 months

Preference between Type I and Type II head protection



Conclusion

- The intervention **positively** influenced workers' perceptions of Type II safety helmets and increased their willingness to adopt them.

- But barriers to adoption exist:
  - Cost
  - No influence on employer purchasing decisions
  - Social factors – norms

- Broader systemic and organizational support necessary