



STOP THE BLEED: Investigating Perceived Confidence



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Introduction

- One of the leading causes of preventable death in the United States is severe bleeding from a traumatic injury.
- Rural communities experience longer EMS response times, increasing the need for confident, prepared bystanders.
- The Stop the Bleed (STB) campaign equips laypeople with the knowledge and bleeding control skills to act in bleeding emergencies.
- Prior research demonstrates increased self-perceived confidence and willingness to intervene immediately after STB training, but long-term retention of confidence is unclear.

Purpose: To determine the self-perceived confidence and knowledge of technical skills acquired during a Stop the Bleed training course.

Theory



Methods

Study design: Quasi-experimental, repeated-measures.

Time frame: November 2025 - March 2026.

Participants:

- **Inclusion:** Adults ≥ 18 years enrolled in STB training course who complete all three surveys.
- **Exclusion:** Individuals < 18 years or those declining the opt-in form.

Procedures:

- Pre-course survey: Demographics, baseline self-perceived confidence, and knowledge items.
- STB training course: Standardized didactic plus hands-on skills practice.
- Immediate post-course survey: Self-perceived confidence, knowledge, and course evaluation.
- One-month follow-up survey: Self-perceived confidence and knowledge retention, plus any real-world use of skills.
- Surveys administered via REDCap or paper copies.

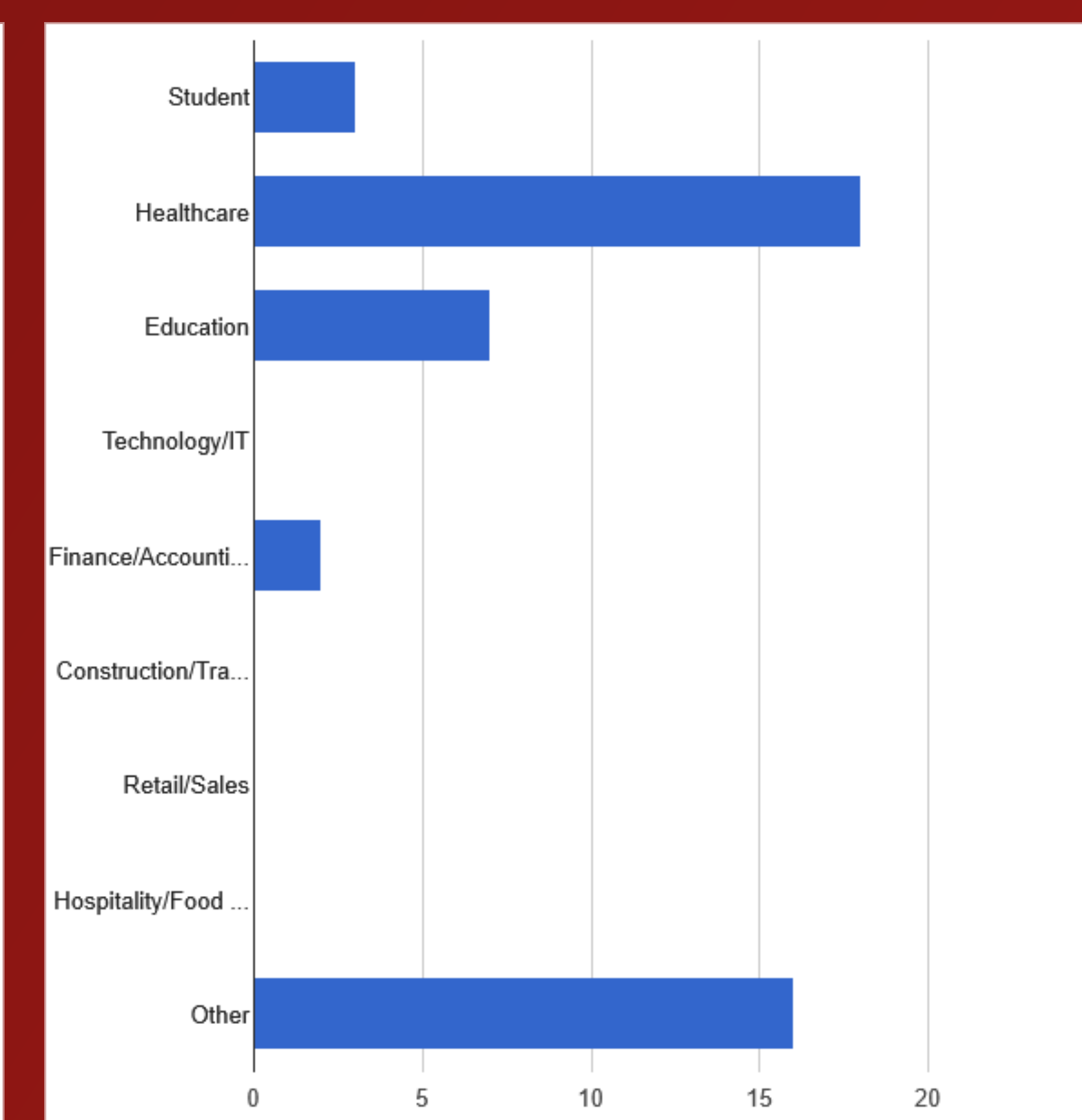
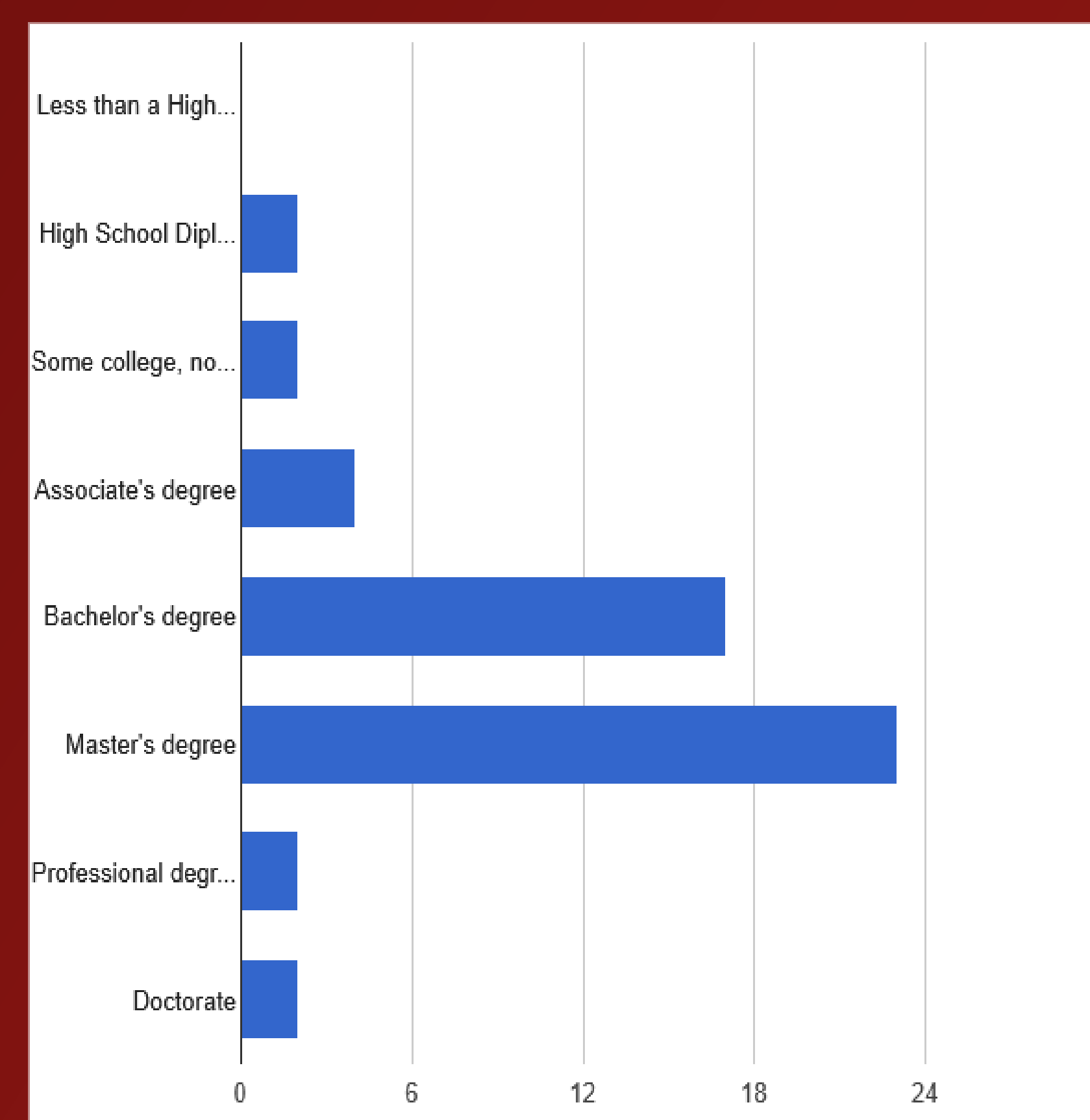
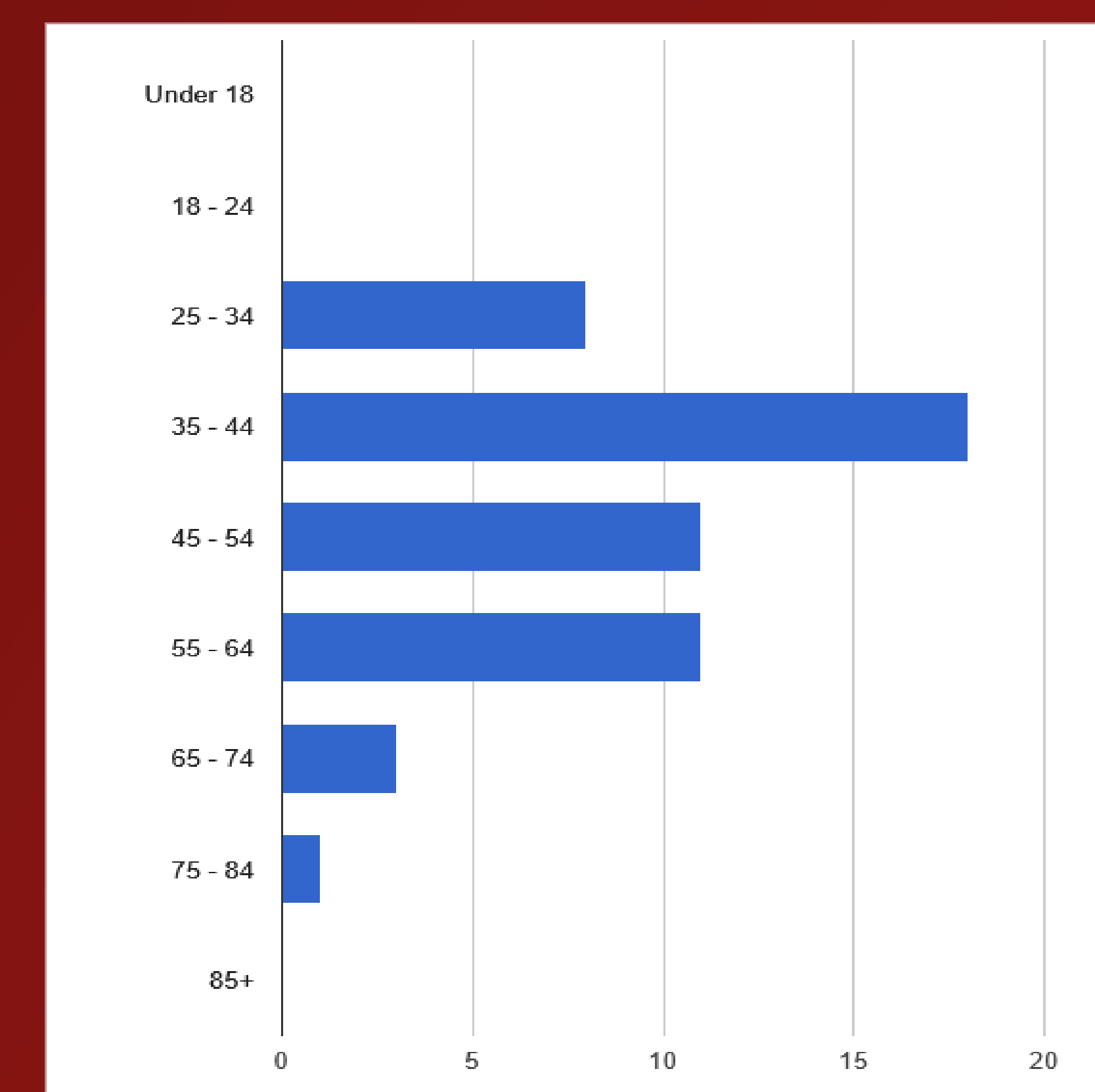
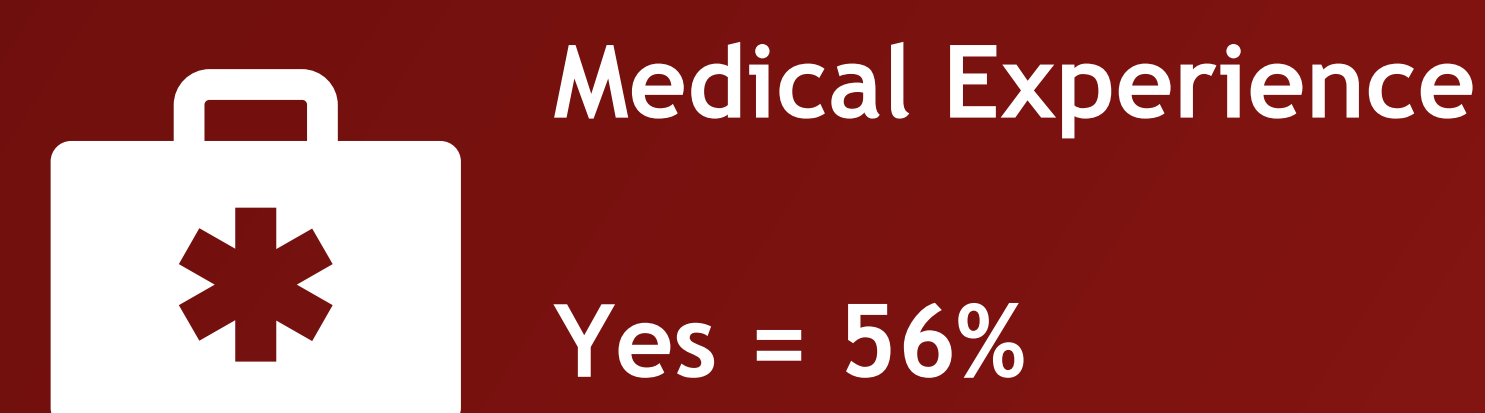
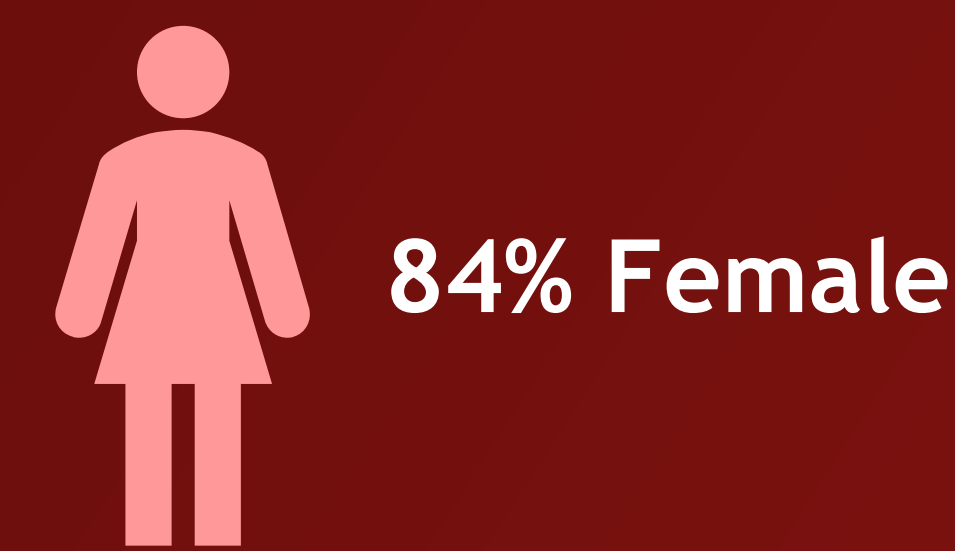
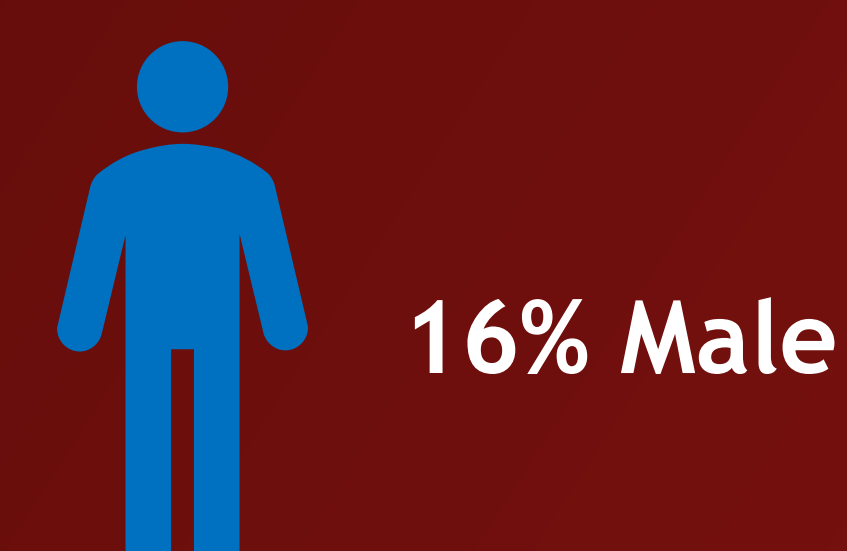
Data Management & Analysis:

- Descriptive statistics for demographics and outcome distributions.
- Paired t -tests to compare pre- to post-course and post- to one-month scores ($\alpha = 0.05$).

Preliminary Results

- There was a statistically significant increase in participant's knowledge of STB technical skills from pre-course survey ($M = 1.8$) to post-course survey ($M = 3.1$), $p < .001$ (two-tailed) with a large effect size (Cohen's $d = 0.84$).
- There was a statistically significant increase in participant's confidence from pre-course survey ($M = 18.6$) to post-course survey ($M = 30.3$), $p < .001$ (two-tailed) with a large effect size (Cohen's $d = 6.04$).
- For this sample ($n = 44$), total knowledge, total confidence, and individual confidence were all found to have a significant difference ($p < .001$).

Demographics



Discussion

Implications & Clinical Relevance:

- There was a significant difference in the perceived confidence and knowledge retention scores at the pre-course survey and in the immediate post-course survey.
- Findings indicate that one-time STB training course is sufficient for increased knowledge retention and self-perceived confidence of STB technical skills.
- Skill retention is especially critical in rural settings where delayed emergency response times increase reliance on bystander intervention.
- The STB curriculum design is effective in increasing participant confidence and knowledge of STB technical skills.



Strengths & Limitations

Strengths:

- Community-based, practice-focused evaluation aligned with a national safety initiative.
- Repeated-measures design captures change and short-term retention across three time points.
- Increased statistical power.
- Use of standardized surveys supports reproducibility.

Limitations:

- Reliance on self-reported confidence rather than observed performance.
- Potential loss to follow-up at one month.
- Variability in instructor style and class composition may influence participant experience.

Future Studies

- Conduct in a multi-institutional setting with larger sample size.
- Multiple instructors with varying levels of teaching experience.
- Measure retention of hands-on skills.

References

