

# Results Section

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## 1 Results

- Welch two-sample t-test
- two populations with variance assumed to be unequal

**Hypothesis 1** *Training of civilians will decrease the time to solution in victims experiencing air-way difficulties.*

$$H_0 : \bar{X}_1 - \bar{X}_2 \geq 0$$

$$H_0 : \bar{X}_1 - \bar{X}_2 < 0$$

- where  $X_1$  is trained and  $X_2$  is untrained

Results:

$$t = -4.7304$$

$$df = 3.0338$$

$$p - value = 0.008729$$

$$\bar{x}_1 = 20.5$$

$$\bar{x}_2 = 400.0$$

$$95\%CI : (-\infty, -191.56)$$

**Hypothesis 2** *Training of civilians will decrease the time to solution in victims experiencing arterial bleeding.*

$$H_0 : \bar{X}_1 - \bar{X}_2 \geq 0$$

$$H_0 : \bar{X}_1 - \bar{X}_2 < 0$$

- where  $X_1$  is trained and  $X_2$  is untrained

Results:

$$t = -9.004$$

$$df = 3$$

$$p - value = 0.001446$$

$$\bar{x}_1 = 203.25$$

$$\bar{x}_2 = 480.0$$

$$95\%CI : (-\infty, -204.42)$$