

Targeting an experiment

New Zealand

$$N_{\text{cont}} = 6021 \quad N_{\text{exp}} = 5979$$

$$X_{\text{cont}} = 302 \quad X_{\text{exp}} = 374$$

$$\hat{p}_{\text{cont}} = \frac{X_{\text{cont}}}{N_{\text{cont}}} = 5.1\%$$

$$\hat{p}_{\text{exp}} = \frac{X_{\text{exp}}}{N_{\text{exp}}} = 6.3\%$$

$$\hat{p}_{\text{pool}} = \frac{X_{\text{cont}} + X_{\text{exp}}}{N_{\text{cont}} + N_{\text{exp}}}$$

$$SE_{\text{pool}} = \sqrt{\hat{p}_{\text{pool}}(1 - \hat{p}_{\text{pool}}) \left(\frac{1}{N_{\text{cont}}} + \frac{1}{N_{\text{exp}}} \right)} = 0.0042$$

Other

$$N_{\text{cont}} = 50,000$$

$$X_{\text{cont}} = 2500$$

$$N_{\text{exp}} = 50,000$$

$$X_{\text{exp}} = 2500$$

Global

$$SE_{\text{pool}} = 0.0013$$

Is there a statistically significant difference ($\alpha = 0.05$) in:

New Zealand

☒ Yes

☐ No

Globally

☐ Yes

☒ No