

Stats Support 4: Lecture 5
Practice questions

Will be taken up in Stats Support on Fri February 07th – at 1130 in W170 and 230 in LH101. Remember you do not need to complete the questions to attend this portion of stats support.

From previous weeks: We created a 'happiness scale' out of various attitude and emotion questions on a survey administered to 560 auto workers in a large auto-factory in Ontario. The scale ranges from 0 - 50 (50 would be perfect happiness) and had a mean of 32.67 and a standard deviation of 5.7.

1. Calculate a 90% confidence interval using this information. Now calculate a 99% confidence interval. How are they different and why?

From last week: When we surveyed all of the workers at the large auto-factory in the example above, we ended up with a mean of 30.3 and a standard deviation of 4.2.

2. Use this population information to recalculate the two confidence intervals above. How is this different from what we just did?

3. Take your two confidence intervals from 1. above and recalculate them using a sample size of 5600 instead of 560. How are they different and why?

Also from last week: 38% of the sample were female and 36% of the population were female.

4. Calculate a confidence interval with, and then without the population information on the distribution of gender. Use an alpha of .05. What's going on here?