Will Accuracy increase when Confidence Level increases?

**Yes!** it will Increase

**Justification:**

**What is Confidence Level / Interval?**

The range where the true population parameter will be available is called **Confidence Interval**.

As shown below based on the range the **Confidence level** in percentages can be identified.

Each value is 1 unit Standard Deviation[sigma] from the Mean.

If the range lies from -3(sigma) to +3(sigma) – 97% of data lies

If the range lies from -2(sigma) to +2(sigma) – 95% of data lies

If the range lies form -1(sigma) to +1(sigma) – 68% of data lies

|  |
| --- |
| https://www.statisticshowto.datasciencecentral.com/wp-content/uploads/2013/09/standard-normal-distribution.jpg |

From this we can understand that larger the Confidence Interval, larger the Confidence Level

hence there are chances that we can take more number of samples, hence accuracy to find the true population mean will be higher.

Accuracy will be more

Confidence Level is higher

is

Is higher

Confidence Interval is higher