

REAL GRR EXPERIMENT

The Experiment: We run an experiment with three (3) operators (students), five (5) parts of different songs in which the operator had to recognize and count how many times heard a specific word, and three (3) repetitions of each song. Each one of the 3 operators checked 5 parts 3 times. The specification limits are 5-13 times (UCL – LCL = 8)

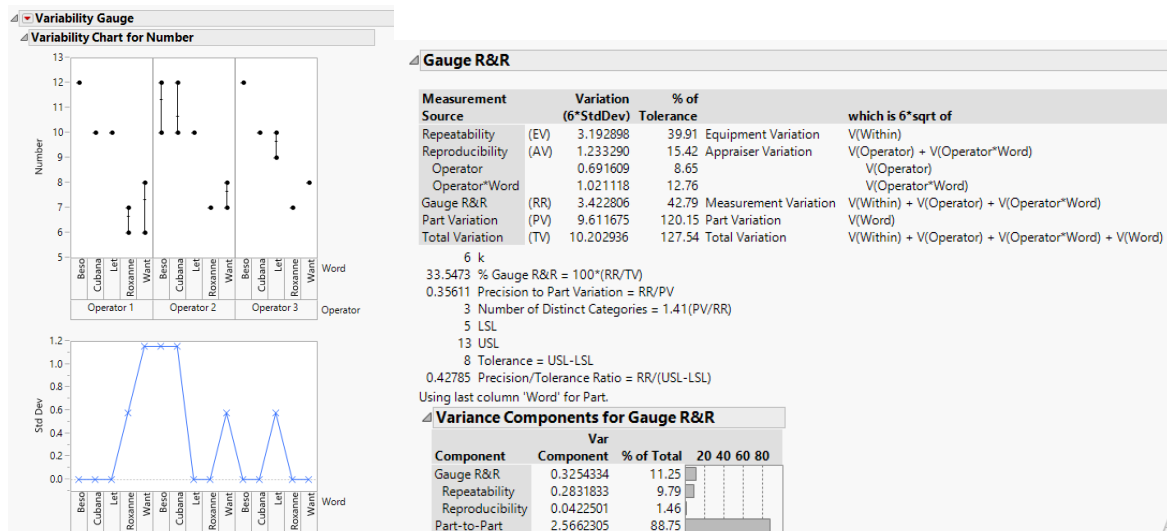
The Method: None of the operators recognized any item that they were re-measuring because we informed them that they were going to listen to three different intervals of the same song but not the same one. At the same time, we set the song's reproduction with a higher speed in order to raise the difficulty of listening. Each part of song lasts an average of twenty five (25) seconds.

Test Procedure: The operator was informed about the word which he had to pay attention to. On a paper the operator wrote down the number of times he heard the specific word. We did not run the three repetitions one after the other but once repetition of each song per operator and then the second repetition for each operator and lastly the third in order to avoid that the operator would remember the number of times he heard the word and to be influenced by his last answer. We did it all the measurements in the same day.

The songs and the words that we selected were the followings:

SONG	WORD
Beso a beso – La Mona Jimenez	Beso
El gato volador – El chombo	Cubana
Let it be – The Beatles	Let
Roxanne – The Police	Roxanne
Wannabe – Spice Girls	Want

JMP:



Validity of the report:

39,91% of the specification is being used by the device (Repeatability). This value is quite high; we could say that the operators get different results when they measure again the same part. A small specification adding to the fact that sometimes could be difficult to detect words in Spanish or English in a high speed for the Israeli operator, they get a number and when they re-measure it again they get a different one.

15,42% of the specification is being used by the operator (Reproducibility). Each operator had different results in his repetitions and it impacts in the result in combination with our small specification. In our opinion, this number would be much lesser if we could run a big number of runs with a bigger specification.

42,78% of the specification is being used by the measuring system. It means that the measuring system is not reliable enough (it exceeds more than twice the limit value of 20% to be considered). That is mainly because our specification is very small ($UCL-LCL = 8$). As far as we concerned if we could raise the specification, that is the expected value of the process, we could make the measuring system reliable enough.

Photos:

