

## AM I IN TUNE OR NOT?

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### Background

Singers may sometimes deviate from the correct intonation patterns. It is not always evident why this kind of deviations happen.

### Aims

The present study addresses the issue of whether a singer is aware of how accurate her/his intonation is (or was) during the performance.

### Method

Thirteen singing students were asked to perform a vocal exercise which consisted melodic intervals of the size of one, six and seven semitones. After the performance, each subject was asked to indicate by memory which notes she/he was able to intone correctly and which not. As the third step in the experiment, the subjects had to listen to their own performance again and, as previously, to indicate both the location of the intonation errors as well as their direction. The equally tempered tuning was used as a reference system.

### Results

Some subjects were unable to perform the task altogether while the standard deviation for other subjects was never more than 14 cents. Minor seconds were performed more accurately than tritones. Those intervals which the singers selected out as mistuned during the immediate post-experimental interviews were not different from the other performed intervals in a statistically significant manner. The magnitudes of reported mistunings were, statistically, significantly greater than the magnitudes of other, unreported mistunings, after the subjects listened to their own performance.

### Conclusions

The singers' ability to perceive their own intonation errors is worse during the performance itself when compared to their ability to do the same during the subsequent listening to their recorded performance. The ability of correct intonation is largely dependent on the skills and training of the performer.