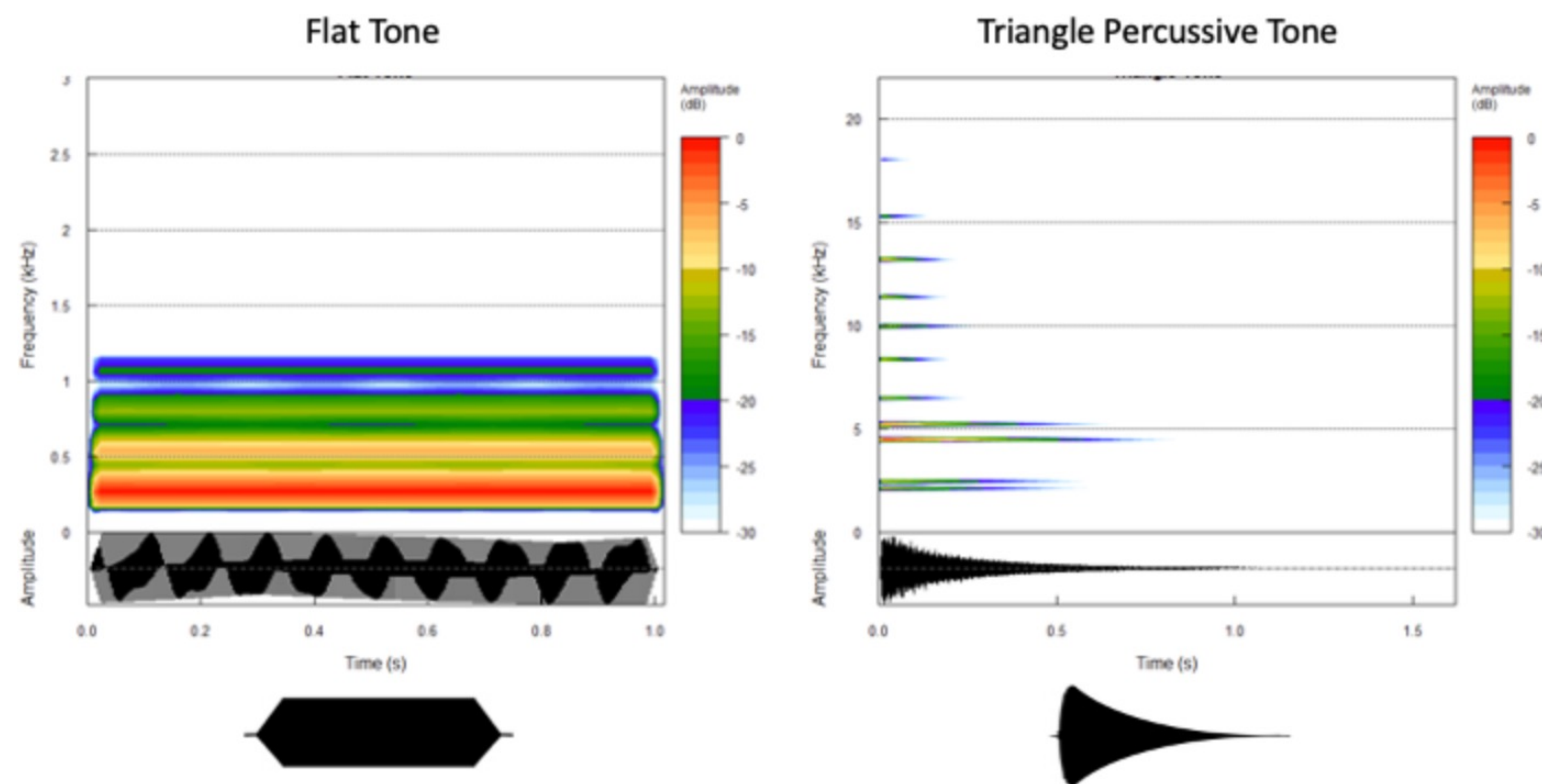
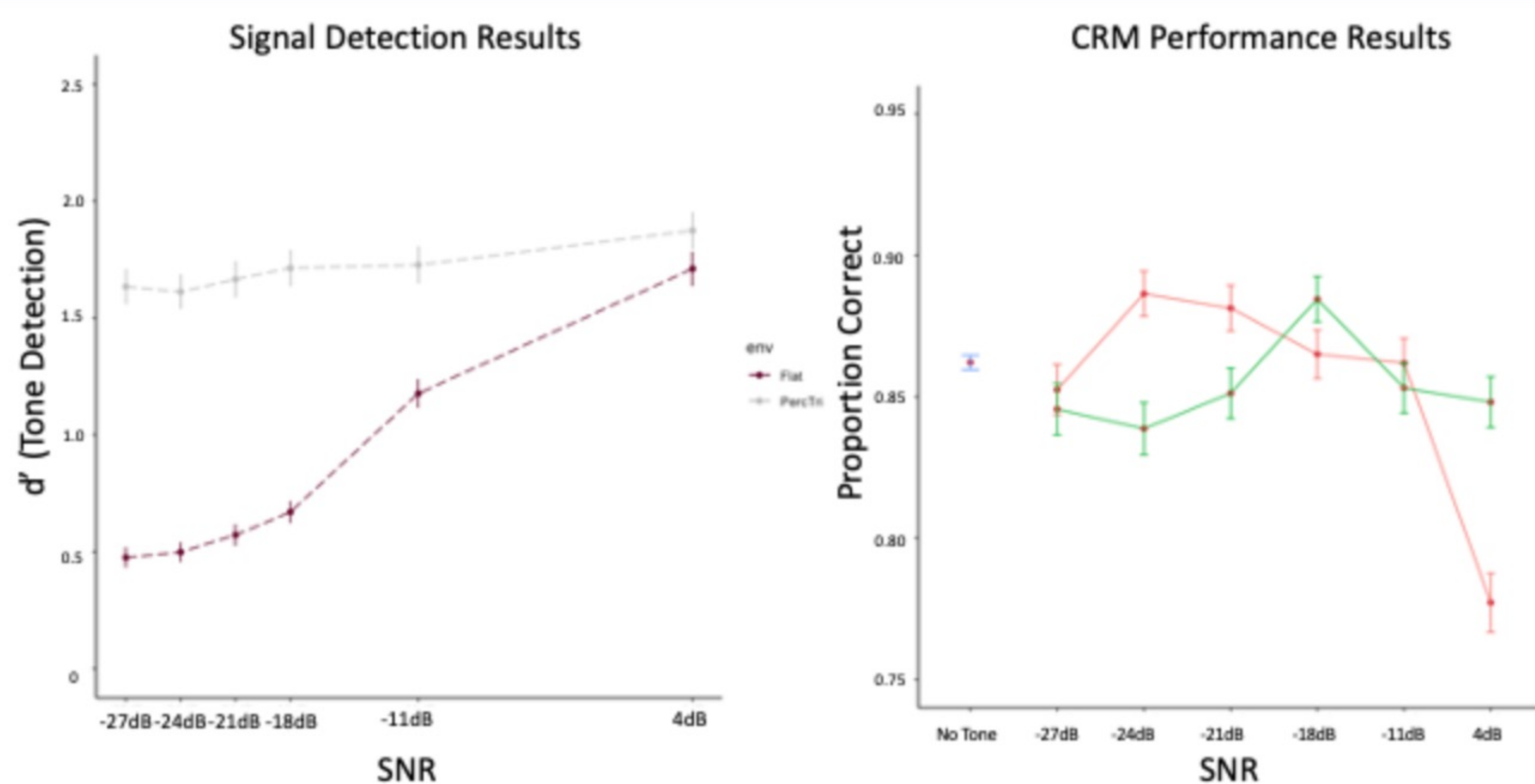


Rationale



Why use the acoustic properties of musical instruments?
Are Triangle Percussive tones better at detection than Flat tones?

Results



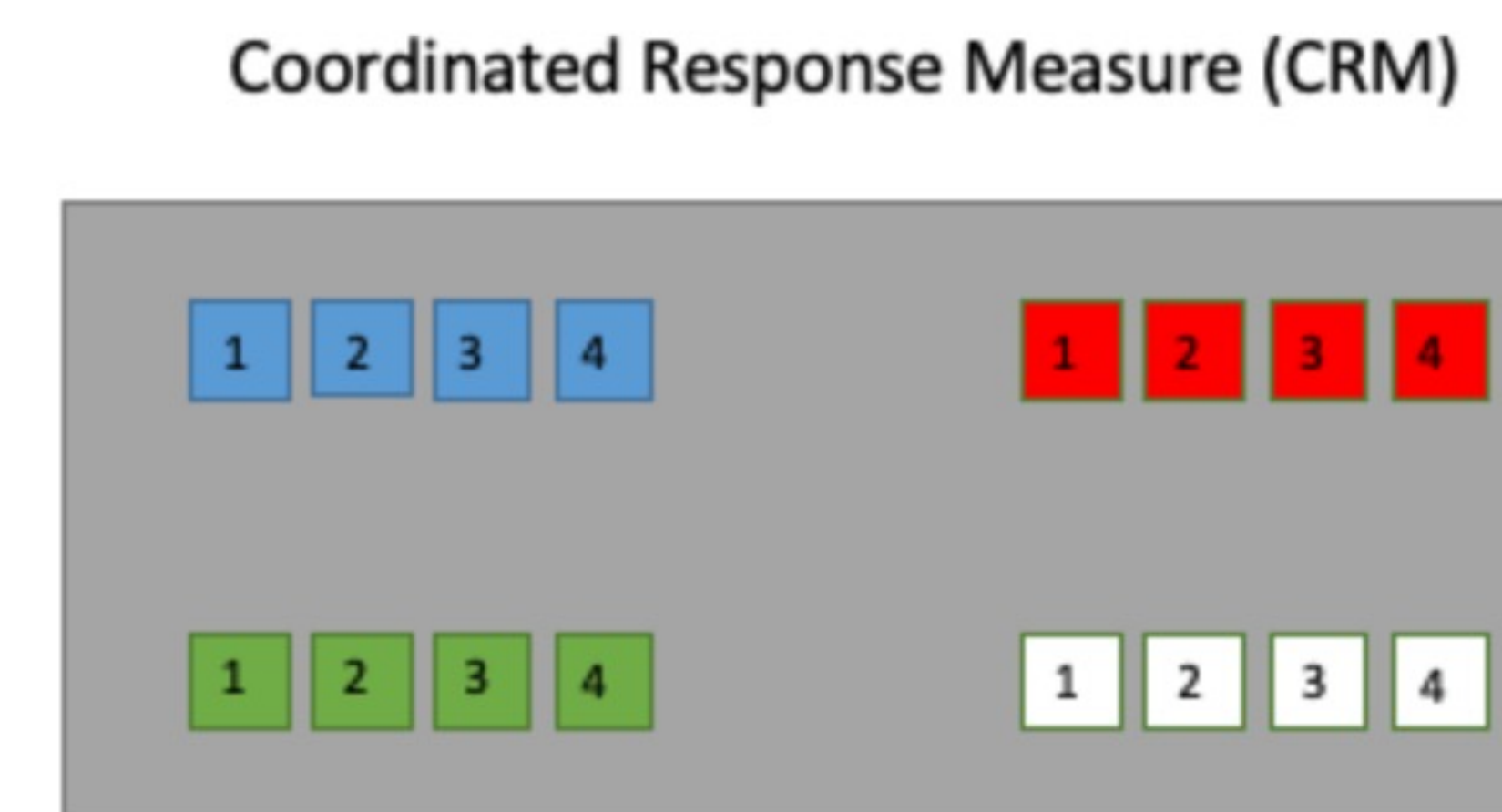
Results Take-Away

- d' is significantly higher for triangle percussive tones at all SNR conditions compared to flat tones
- No main significant difference between flat and triangle percussive tones in CRM performance compared to No Tone condition.

*error bars denote +/- 1 standard error

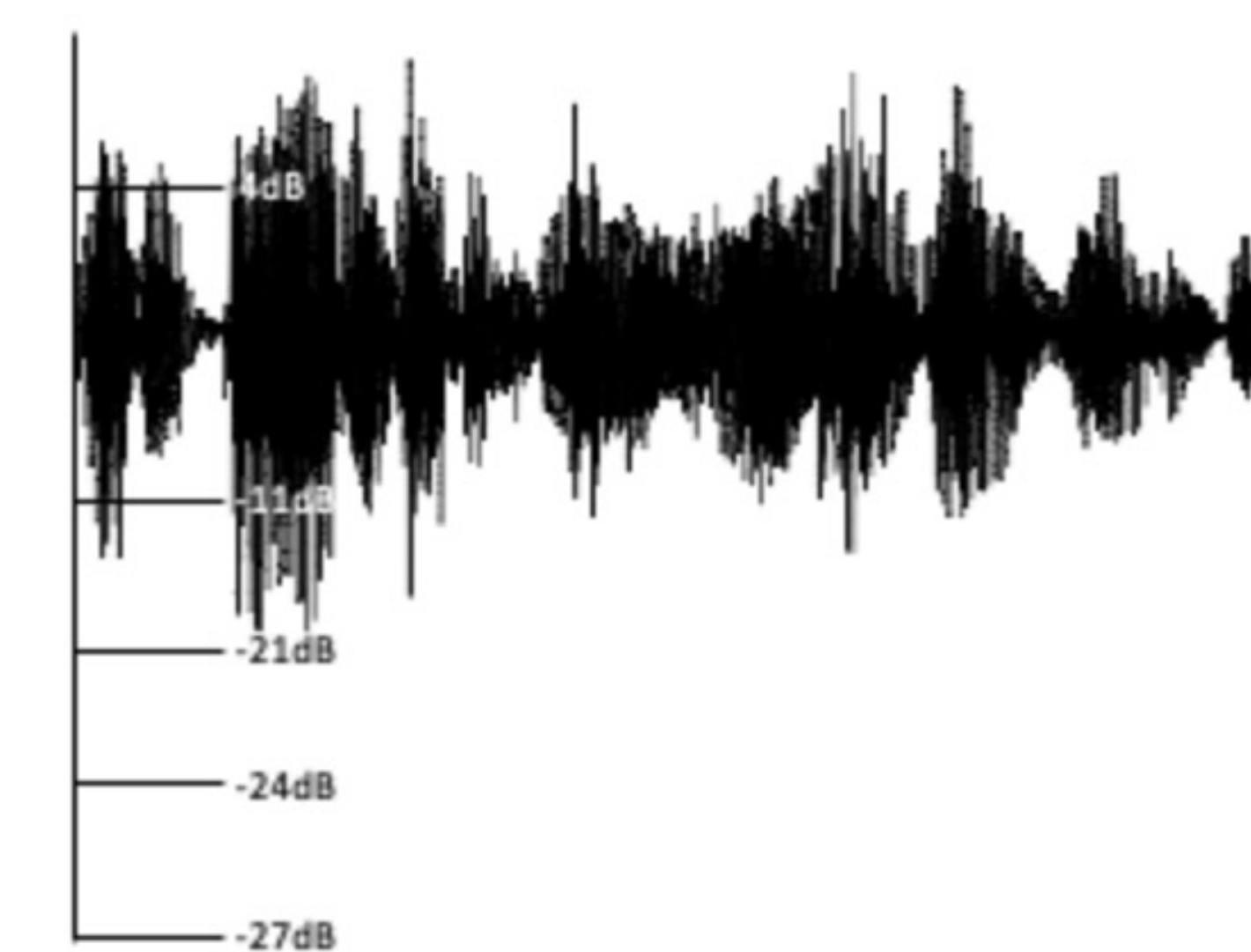
Methods

Stimuli

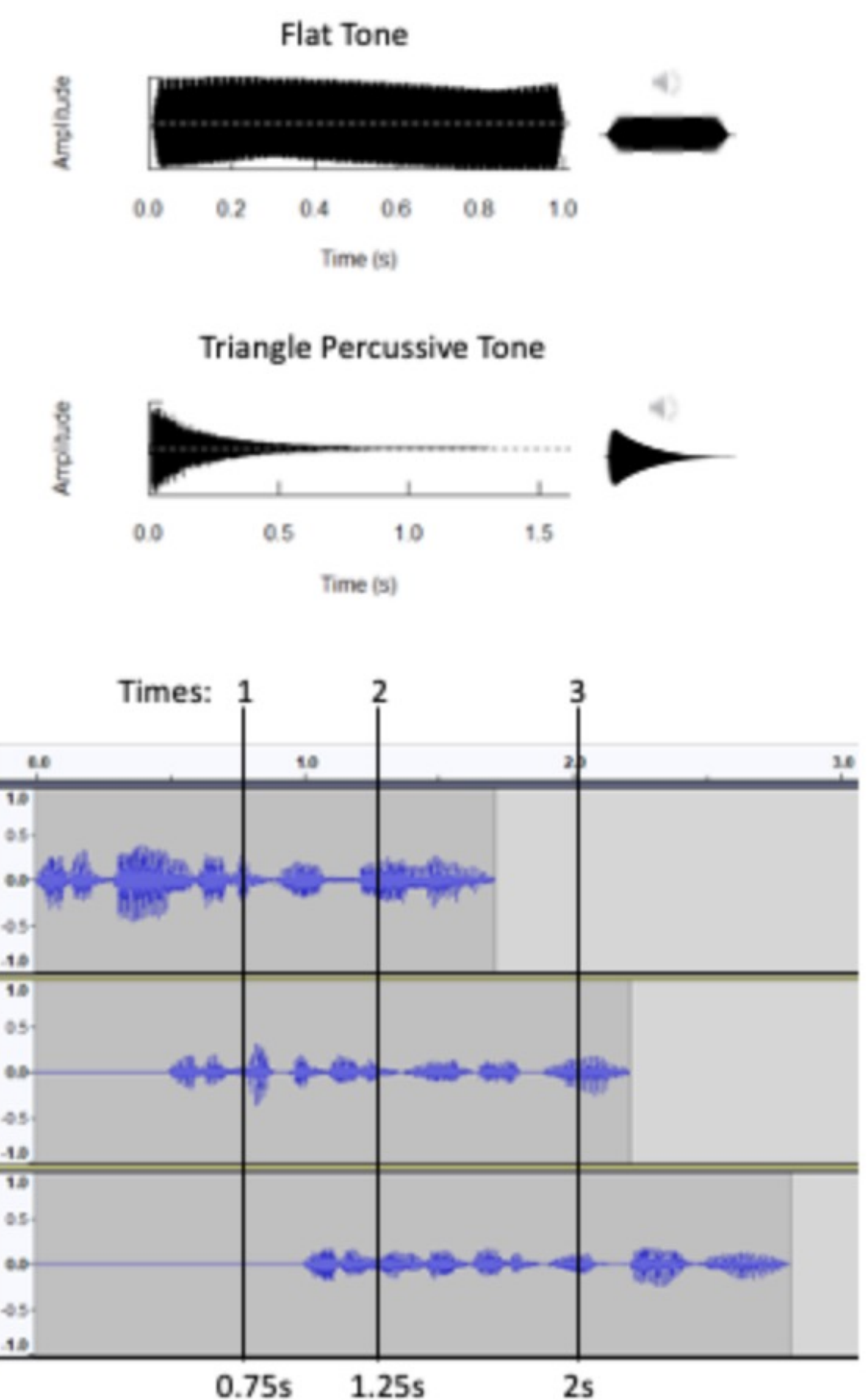


Tone or No Tone
50% 50%

SNR Levels



Amplitude Envelope



Conclusions and Future Directions

- Percussive triangle tones remained high in detectability in all SNR conditions.
- Exploring and implementing the acoustic properties of musical instruments could increase the efficiency of alarm systems.
- Future studies should look at masking thresholds and annoyance ratings of these triangle percussive tones.



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