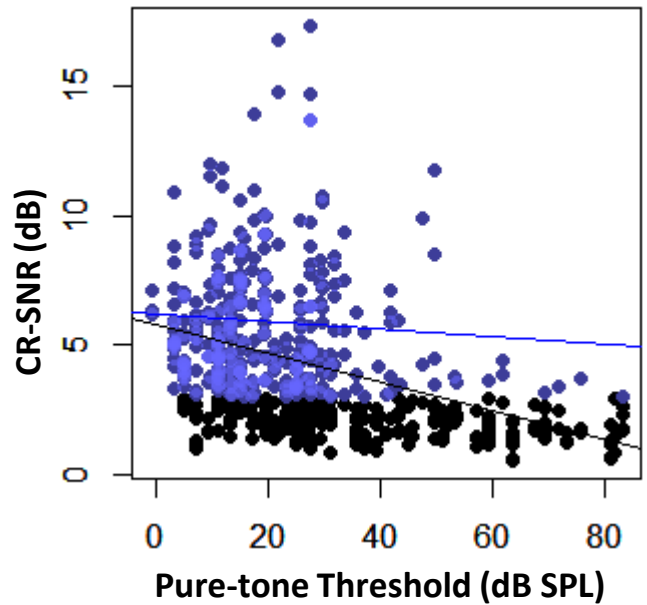
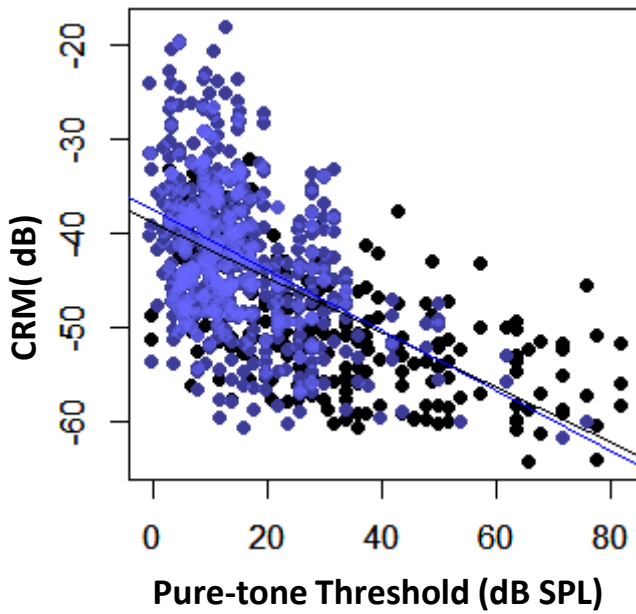


Supplementary File – SNR Criteria

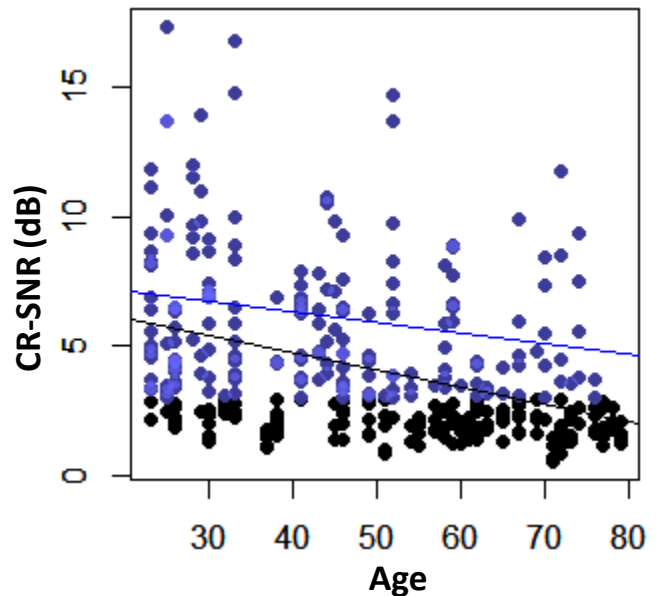
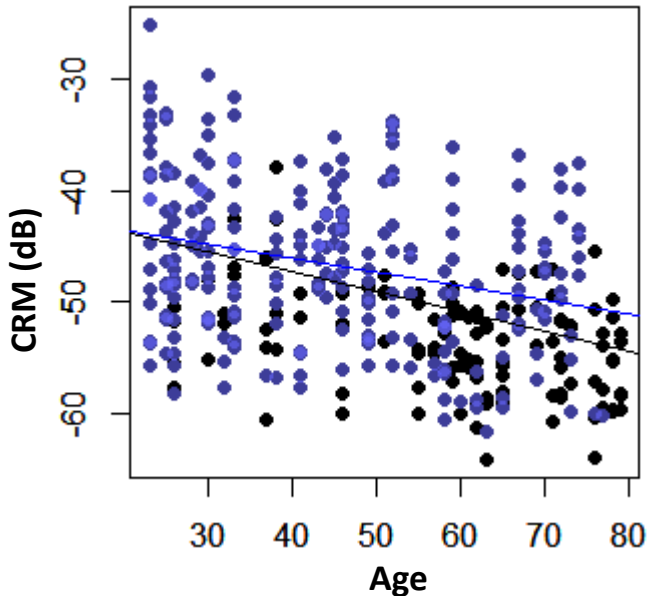


DV ~ PT + Intercept

All CRM: $\beta_{PT} = -0.29$, CRM with $SNR \geq 3$ dB: $\beta_{PT} = -0.32$. [69.4% of CRM data with $SNR \geq 3$ dB.]

All CR-SNR: $\beta_{PT} = -0.06$, CR-SNR with $SNR \geq 3$ dB: $\beta_{PT} = -0.01$. [57.6% of CR-SNR data with $SNR \geq 3$ dB.]

Black data points show CRM and CR-SNR from the frequencies with significant pure-tone threshold effects across presentation levels (age effects, below). Superimposed blue points show data with $SNR > 3$ dB. The relationship between PT and CR-SNR was distorted to the greatest extent by excluding data with $CR-SNR < 3$ dB (42.4%), which we explore further on the next page.



DV ~ Age + Intercept

All CRM: $\beta_{Age} = -0.18$, CRM with $SNR \geq 3$ dB: $\beta_{Age} = -0.13$. [64.4% of CRM data with $SNR \geq 3$ dB.]

All CR-SNR: $\beta_{Age} = -0.07$, CR-SNR with $SNR \geq 3$ dB: $\beta_{Age} = -0.04$. [49.7% of CR-SNR data with $SNR \geq 3$ dB.]

Black data points show CRM and CR-SNR from the frequencies with significant age effects across presentation levels. Superimposed blue points show data with $SNR > 3$ dB.

Supplementary File – SNR Criteria

Effect of Hearing Sensitivity on CR-SNR

When the minimum CR-SNR was raised from CR-SNR ≥ 0 dB to 6 dB, the slope is fitted to a decreasing proportion of the dataset. The exclusion of smaller CR-SNR values from the data sample biases the estimated correlation between PT and CR-SNR. For example, spurious positive associations are observed between the CR-SNR and PT with thresholds of 4 to 6 dB.

<i>SNR Threshold</i>	<i>Data above threshold</i>	<i>Effect estimate (θ_{PT})</i>
0 dB	100%	-0.06
1 dB	99%	-0.05
2 dB	81%	-0.04
3 dB	58%	-0.01
4 dB	44%	+0.02
5 dB	32%	+0.05
6 dB	23%	+0.04

Biased Effects of PT on CR-SNR with High SNR Thresholds

