Infants Relax in Response to Unfamiliar Foreign Lullabies

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Abstract

Music is a human universal characterized by acoustical forms that are predictive of its behavioral functions. For example, listeners accurately distinguish between unfamiliar lullabies and other songs on the basis of their features alone. This could be attributable to adults extensive musical experience, however. Here we show that infants (N = 144) relax in response to foreign lullabies, relative to matched foreign non-lullabies, as measured by heart rate, electrodermal activity, and pupillometry. These results were unrelated to age, suggesting the relaxation response is not a function of infants rich musical experiences. Infants showed no visual preferences for the animated characters producing the songs, but they attended more to the lullabies, blinking less during the singing. Moreover, the infants parents chose lullabies as the songs that they themselves would use to calm their fussy infant. These findings raise the possibility that links between form and function in music are innately specified.