DETECTION OF WRONG NOTES IN FAMILIAR MELODIES THAT HAVE OUT-OF-KEY NOTES IN THEM

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In previous studies out-of-key wrong notes in familiar melodies were detected quickly and accurately. Here we introduced out-of-key into unfamiliar folksongs and familiarized listeners with them in four sessions over two weeks. We introduced out-of-key notes by raising or lowering the second or the sixth degree of the major scale 1 semitone. Then we tested listeners' detection of further alterations in those notes, as well as of notes that had remained in-key in the familiarized song. We found evidence both in response time and accuracy that the familiarized out-of-key notes were not as reliable a part of the memory representation of the familiarized song as were the originally in-key notes. The scale degree and direction of initial alteration also affected listeners' responses. There was little effect of musical training except for a slowing of moderately trained musicians' responses to familiarized out-of-key notes that returned to in-key.