Music and Emotion: The Intervallic Fallacy of the Major-Minor Dichotomy

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This project aims to expose a widespread inaccuracy in the work of academic researchers regarding how music affects human emotion. A centuries-old musical phenomenon known as the “major-minor dichotomy” refers to the fact that major-key music tends to sound happy while minor-key music tends to sound sad. The dichotomy also applies to major and minor chords, as they form the foundation of the major and minor keys. Unfortunately, researchers typically misunderstand the dichotomy as also applying to the major-third and minor-third intervals that comprise these chords. This mistake impedes the efficacy of studies aimed at determining how music can benefit society, from improving cognition and memory to treating disorders such as depression and anxiety. To test my hypothesis that the dichotomy is inapplicable to intervals, I created a survey in which 180 adult participants listened to six audio samples and reported emotional responses on a Likert scale (from “Definitely Sad” to “Definitely Happy”). The samples, presented in a non-logical order to avoid leading participants, featured each interval alone and within a major and minor chordal context. The participants reported a remarkably high neutral response, and the vast majority of the happy or sad responses lacked confidence. Furthermore, the two intervals alone yielded nearly identical, neutral results while the intervals presented within a major or minor chordal context yielded responses that reflect the happy-sad duality of those chords. The results support my hypothesis that the major-minor dichotomy on the intervallic level is a fallacy.

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