Animal Comprehension of Music

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Abstract

The problem investigated by the experiment was if and how animals can comprehend music in ways comparable to humans. Two zebrafish (*Danio rerio*) were placed in flasks and exposed to six different genres of music and a control. Songs were chosen according to how well they represented the overall genre. The fish were exposed in three-minute trials and their responses were recorded. The categories of swimming speed, vertical swimming, directional changes, glass contact, random twitching, and respiration rate were compared against the control. The results of the experiment showed that (as expected) the more-intense songs brought out higher levels of the actions tested, while less-intense songs brought out lower levels of the actions tested, sometimes even less action than the control. One song was found to have possibly depicted the human emotion of joy in the fish, due to the combination of low levels of stress and high levels of stimulated activity. If that conclusion were true, it would be a gargantuan leap into understanding animal comprehension of music. More studies are needed in hopes of ever coming to a conclusion or general consensus in the problem of comparing human comprehension of music to that of animals.