

Strategies for tone identification in observers with absolute pitch

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Abstract: Behavioral studies have shown that observers with absolute pitch tend to perform very proficiently in a range of tone identification tasks. However, most studies focus only on response accuracy, leaving the question whether the strategies used by these observers are absolute (i.e., not based on a comparison with an internal or external reference point different from the judged note) or relative (based on estimates of intervals between notes and internal or external reference points). To gain further insight into the nature of tone identification by individuals with absolute pitch, we collected response time data from three participants in a standard two-octave tone identification task. The data showed reliable differences in response time between notes within individuals. We discuss the implications of these differences, and provide an account of judgment by observers with absolute pitch in terms of a relative strategy based on multiple internal references.