

SPA-222

Pitch Memory in Musicians and Non-Musicians

Minghui Hu

Capital Normal University, China

Cong Jiang

Capital Normal University, China

Abstract

Research background:

This study takes the implicit memory of pitch as the main research background, and takes "musicians and non-musicians" as the experimental subjects to analyze the difference of pitch memory between musicians and non-musicians. Pitch memory is the ability of memory to correctly identify the height of a sound in music. Pitch memory plays a positive role in our recognition of pitches. At present, the memory mechanism of Absolute pitch (AP) and Relative pitch (RP) is studied in pitch memory. The two types of pitches have different processing methods. The absolute pitches use the brain regions of long-term memory, while the relative pitches use the brain regions of working memory. It is found that at present, more attention is paid to the pitch processing ability of people with music experience at home and abroad, while less attention is paid to the pitch memory processing ability of people without music experience. This study focuses on the ability of non-musicians to process pitch memory, and pays special attention to the formation process and expression characteristics of non-musicians' implicit memory of pitch, so as to provide empirical evidence for music education such as solfeggio and ear training in adult education in primary and secondary schools and colleges.

Research objectives:

The research objective of this thesis is to investigate the necessity of pitch memory for musicians and non-musicians. To determine whether non-musicians in the two groups also have the sense of absolute pitch, whether non-musicians have implicit memory, and whether such implicit memory can be reflected in the sense of absolute pitch, and to compare the different performances of musicians and non-musicians in the sense of absolute pitch.

Research Methods:

In this study, experimental method, interview method and speech analysis of recording materials were adopted. A comparative study was conducted on the experimental methods for the pitch memory of musicians and non-musicians. The subjects were interviewed with detailed information such as place of birth and age by the interview method, and the recorded information was analyzed by the speech analysis method.

Results/Conclusions:

The conclusion of this study is that absolute pitch perception and implicit memory exist in non-musicians, and non-musicians can judge absolute pitch by implicit memory.