Variation in the sound perception of the Thai university students based on sounds produced by the native speakers of English conditioned by wearing facemasks

Abstract

The objectives of this study were: (1) to investigate the perception of voiceless aspirated consonant sounds in the onset positions, and (2) to investigate the perception of certain classes of voiced consonant sounds in the onset positions among Thai speakers who are learning English as a foreign language (EFL), divided into two groups: those wearing a facemask and those without it.

The sample consisted of 30 Thai undergraduate students, including the control group and the experimental group. The participants were selected through purposive sampling. Both groups were asked to take part in a listening test, in which a native speaker with an American accent pronounced the sounds. The control group listened to stimuli sound without wearing a facemask, while the experimental group wore facemasks during the test (3M N95 facemask). The objective was to identify consonant sounds. The test comprised 36 items, and participants were given only one opportunity to listen and mark their answers.

The research findings are as follows: (1) The control group achieved a mean score of 24.87 (out of 30), while the experimental group attained a slightly lower mean score of 23.8. By using the t-test, although the control group had higher average scores, the difference between the two groups was not statistically significant. Additionally, the variables (d3) and (ð) exhibited the highest number of variants compared to other variables, accounting for 70.83% of the total.