**<Some problems we found>**

<1> the first word of each sentence

Most of the test subjects generally had a difficulty in writing down the first word of each sentence, while they easily write down a verb which located in the last part of a sentence. So, they left the part of beginning blank in many sentences, which affected their score a lot. We thought that is because it’s hard to catch the start of sentence in noise and to guess the first word from the context as it is the start point of hearing. In regard to this, there was a problem that the score of the first sentence was 0 for both male and female voice. The sentence was “드센 사람은 피곤하다”, and the beginning word ‘드세다’ was the female word we intended to observe. Accordingly, all the test subjects didn’t hear and write down that word, the first sentence came up with the meaningless result. So we should not have put the major word we planned to observe in the first part when we constructed the experiment sentences.

<2> the female sentences

(1) Among the female sentences, not only the first sentence, but also the second and the third one have too low average score. Each of these three sentences’ average score of the test subjects of female voice was 0, 0.19 and 0.1 which are nearly 0 point. The test subjects with male voice also showed low scores. We thought that as these three sentences are the starting questions, the subjects may have felt difficulty adjusting to noise, or we had made these sentences inappropriately. If we delete these three sentences in our experiment result, the score can be changed to be more meaningful to our hypothesis like the table below.

|  |  |  |
| --- | --- | --- |
| Male voice |  | Female voice |
| **1.18🡪1.33** | female sentence | **1.09🡪1.34** |
| 1.68 | male sentence | 1.05 |
| 1.43 | neutral sentence | 1.36 |

(2) In the experiment result, as we expected, we figured out the tendency that the test subject group with male voice attained higher average score in male sentence than in female sentence, and vice versa. However, we found that the overall female sentences have little discrimination compared to the male sentences. Among the 10 female sentences, the female voice group attained higher average scores than male voice group in only three sentences. In the rest of the female sentences, male voice group had similar scores or higher scores than female voice group. On the other hand, male voice group had much higher scores than female voice group in all male sentences except two. And for neutral sentences, the voice’s gender difference was not an important factor in a percentage of correct answers as we expected. According to this result, we conclude that we made some faults for constructing female sentences in the experiment. Therefore, we think we’d better revise the female sentences by using other words containing gender discriminative perception.

<3> the counterexamples

In the experiment result, we found some counterexamples. In the other word, there were some male sentences showing higher average score with female voice, and vice versa. For example, “오늘따라 더 예민해 보인다” and “그렇게 극성맞은 사람은 처음이야” belong to ‘female sentence’, but the test subjects with male voice heard these sentences much better. “내 조카는 장난기가 많다” and “그 사람은 매우 가정적이다” belong to ‘male sentence’, but the test subjects with female voice heard them better. The reason why these counterexamples occurred is, we guess, though the sentence includes a female or male word, the whole sentence could be commonly spoken by the opposite gender. For instance, the situation may frequently happen that a man say “You look so sensitive today” looking a woman.