

Abstract

Auditory processing is beyond the peripheral auditory system that is assessed by the audiology routine tests including pure-tone audiometry and tympanometry (1). It also involves the specific central auditory skills such as localization and lateralization, auditory discrimination, auditory pattern recognition, temporal processing, low-redundancy speech perception, and speech perception in presence of a competing sound (2). The poor performance in one or more of the above-mentioned skills might be attributed to the central auditory processing disorder (CAPD) (3).

Older adults usually experience more challenges with the speech understanding under conditions with unwanted signal such as noise or any other interfering signal compared to adolescents (4). Listening to the target speech in the presence of only one competing voice needs to divide and selective attention to discriminate the target speech and focus on it (5). This ability reduces with increasing age even when pure-tone hearing thresholds are normal (6).

The speech in noise test is a main procedure to measure the ability of speech perception under difficult situations (7).

Résultats

- The results of current study demonstrated that there was not a significant difference in total score of P-UCAPI in two age groups. The middle-ages group had lower scores in the P-WIN test compared to the young adults and the mean scores were significantly lower in the left ear.

| Measures | Mean ± SD | | t | p |
|-----------|--------------|---------------|--------|------|
| | Young | Middle-aged | | |
| P-WRSR | 98.88 ± 2.99 | 98.60 ± 2.66 | .494 | .623 |
| P-WRSL | 98.99 ± 2.38 | 98.88 ± 1.78 | .266 | .791 |
| SNR-50% R | -.34 ± 1.43 | .45 ± 1.40 | -2.76 | .007 |
| SNR-50% L | .38 ± 1.43 | 1.05 ± 1.60 | -2.20 | .030 |
| P-WIN R | 94.17 ± 5.02 | 91.43 ± 4.91 | 2.76 | .007 |
| P-WIN L | 91.65 ± 5.01 | 89.30 ± 5.64 | 2.203 | .030 |
| P-CWR | 85.35 ± 5.64 | 88.32 ± 12.38 | -1.365 | .175 |
| P-CWL | 91.68 ± 8.62 | 91.42 ± 10.52 | .137 | .691 |

P-WRS = Persian words Recognition Score in silent test, P-WIN = Persian words in noise test, P-CW = Persian competing words test, the final letters of acronyms (R and

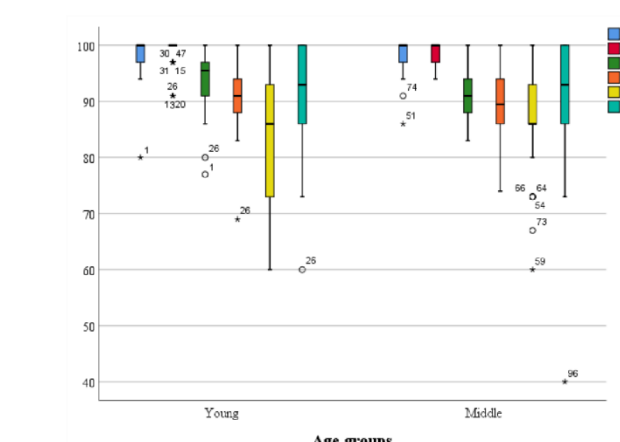
L) indicate the right and left ear, SNR = Signal to Noise Ratio, SD = Standard Deviation.

Objectifs

The purpose of this study was to examine the ability of speech perception by the Persian version of the University of Cincinnati Auditory Processing Inventory questionnaire (P-UCAPI), Persian words recognition score (P-WRS), Persian words in noise (P-WIN) and Persian competing words (P-CW) tests between middle-aged and young adults.

Conclusion

The findings of the current study reveal that middle-aged adults have more problems in speech perception than young adults in noisy listening situation.



Note: A comparison of mean scores in three scales including Persian word recognition score (P-WRS), P-WRS (Persian word in noise (P-WIN R, P-WIN L), and competing condition (P-CWR, P-CWL) in two ears in two age groups.

Méthodes et Matériels

- We considered 100 adults admitted to the Audiology Department of the Rohani Hospital in the north of Iran. Descriptive analysis was performed to determine mean scores and standard deviations. Paired sample t-test, independent sample t-test, and One-way ANOVA were applied to compare our research variables. Significance level was considered at $p < .05$.

Références

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