**Abstract**

**Background:** Carrier phrases, typically utilised in speech audiometric tests, serve as introductory sentences preceding the target or test words. Despite their common use, the precise function of carrier phrases and their potential advantages or drawbacks remain largely unexplored. Understanding the impact of carrier phrases on speech perception is crucial for enhancing clinical testing methodologies and optimising diagnostic procedures for individuals with hearing impairments.

**Purpose:** This study aims to investigate the influence of carrier phrases on speech perception among individuals with normal hearing in speech-weighted noise.

**Method:** Twenty-three participants with normal hearing, averaging 35 years of age, were recruited for the study. The speech material comprised Swedish phonetically balanced (PB) word lists presented in speech-weighted noise at +4 dB signal-to-noise ratio (SNR). Each participant was exposed to various versions of these lists, both with and without the inclusion of a carrier phrase.

**Results:** Analysis of the results revealed no statistically significant difference in speech perception scores between the test conditions with and without the carrier phrase, with a two-tailed p-value of 0.716. This suggests that the presence of carrier phrases does not enhance speech perception in speech-weighted noise among individuals with normal hearing.

**Discussion:** These findings align with prior research indicating a limited effect of carrier phrases on speech perception under similar conditions. Variability in individual responses to carrier phrases implies that the cognitive preparation facilitated by these phrases may vary among listeners. The study underscores the importance of further investigating the role of carrier phrases across diverse acoustic settings and with varying speech materials.

**Conclusion:** The study suggests that carrier phrases do not significantly improve speech perception in noise among individuals with normal hearing. Further research is needed to fully understand the role of carrier phrases in different listening conditions.

**Keywords:** auditory perception, carrier phrase, co-articulation, noise, normal hearing, phoneme, signal-to-noise ratio(SNR), speech audiometry, speech perception, speech perception in noise