

An Experimental Study of Age and Language Variables in a Competing Message Task *

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The present study was designed to study the effect of age and the effect of familiarity on a competing message task. The stimuli consisted of two-digit numbers ranging from 21 to 91. The language of the primary signal varied from English to Telugu and a corresponding variation in the language of the competing message was made from English to Telugu. Further the signal-to-noise ratios of the competing message was changed from -12 dB to $+12$ dB in 6 dB steps. The raw scores were converted into percentages. For analysis of the data, results from parallel studies were utilised.

The data were presented graphically and analysed statistically. First the results showed a significant difference between the performance of young and old subjects. Second, the results showed that signal-to-noise ratio made a significant difference with both the younger and the older subjects scoring better as signal-to-noise ratio was increased in the positive direction. Third, whether the language was familiar or unfamiliar

did not make a difference to the performance of older subjects. The interaction effect between age and signal-to-noise ratio indicated that the younger and the older groups were not affected equally. This conclusion, however, holds good when the competing message was in the familiar language, but not when the competing message was in the unfamiliar language.

Conclusions

The following conclusions seemed warranted :

- (1) With increasing signal-to-noise ratios the performance of subjects on the task improved. Varying the signal-to-noise ratios differentially affect the performance of older and younger subjects.
- (2) Older subjects perform significantly poorer than younger subjects on a competing message task.
- (3) Familiarity with the language of the competing message does not seem to make significant difference in the performance of older subjects.

* Master's Dissertation, University of Mysore, 1977.