SUMMARY

Most of the neuropsychological research cites the fact that the left and the right hemispheres of the brain are specialized for different functions. This phenomenon is known as brain laterization of functions. The left hemisphere is specialized for linguistic and sequential functions, whereas the right hemisphere is specialized for non-linguistic/visuo-spatial functions. Abundance of researches support the fact that the language centre for the right handed is situated in the left hemisphere and the language centre for the left handed may be situated in the right hemisphere or is bilateralized. It is investigated as to what hemispheric processes may be operating in monolinguals and bilinguals and that also when an individual either learns the 2nd language early or late. Besides what pattern early and late bilinguals exhibit at younger and adult age. The mode of processing the language-silent and aloud, was another independent variable. A sample of 350 right-handed males, with no familial history of left handedness, aging 10 to 22 years from normal school and college population served as subjects, except monolingual adults who were non-students. However 163 Ss were retained for analysis of the disruption
quotients as obtained by using time sharing technique. The obtained DQ's of various groups under different conditions were analysed by ANOVA suitable to the design.

Analysis revealed that the language is predominantly processed in the left hemisphere in monolingual Ss, though with increasing age the left lateralization weakens. Secondly, bilingual subjects also exhibited left lateralization for the processing of the 1st language and a decreasing left pattern with age as adults. Thirdly, the lateralization of second language also changes with age such that it becomes bilateral in adulthood. Though, early bilinguals process 2nd language predominantly in the left hemisphere at younger age but become bilateral in adulthood. On the other hand, Ss who have learned the second language at later age (late-bilinguals), process 2nd language predominantly in the right hemisphere in younger age and tend to become bilateral in adulthood. This pattern is true for loud (reading and speaking) as well as silent (reading only) processing of the language. Findings have been discussed with reference to the existing trend in review and future directions have been suggested. The educational implications of the findings with special reference to late bilinguals have also been discussed.