CHAPTER 7: CONCLUSION

The study reflects upon the trends and correlations between electrophysiological thresholds and behavioural comfort levels recorded over time, among cohorts of comparable cochlear implantees, in the Indian clinical scenario.

Although, inter-patient & inter-electrode variables were bound to be an integral part of this study, an overall trend was observed in the electrical and behavioural responses of the auditory nerve over time, which provided a way for correlating the various parameters and to derive predictive formulae for calculating optimal behavioural comfort levels (if unknown) using regression analysis.

The study highlights a statistical method which may be used for reference, as a guideline to predict optimal behavioural levels in difficult situations among future implantees. The clinical efficacy of the multi-modal prediction method tested in cohorts of comparable cochlear implantees, has proved the study hypothesis and has fulfilled the anticipated outcomes of developing a clinically successful statistical method for optimal implant programming.
All the 58 children included in this study, using the various types of cochlear implants, eventually had successful and comparable outcomes with intensive auditory verbal habilitation, by the end of their study period.

Objective measures of cochlear implant function become vital, whenever behavioural responses are inconsistent and especially while programming very young cochlear implantees and those with special needs. In such cases, following a protocol of Mapping in conjunction with multi-modal electrophysiological tests, as described in this study may provide the best outcomes.