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The pattern of hearing use in daily life situations in an adult Danish population

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Background and Aim: A self-report of situations where hearing aid (HA) users either use or do not use the HAs can provide insight into individualized HA usage patterns. Understanding HA usage patterns can help hearing care professionals provide a tailored solution to meet the usage needs of HA users. The study aims to understand HA usage patterns in the daily life of an adult Danish population and examine their relationship to hearing loss, demographics, socio-economic indicators, user-related factors, and self-reported outcomes.

Method: The study included 1537 participants who responded to two questions related to situations where they always took off or put on the HAs. A latent class analysis was performed to stratify the HA users according to their HA usage pattern. Analysis was performed to understand the difference between the stratified groups of HA users according to their HA usage pattern and demographic, hearing-related, socio-economic, and HA-related factors. A stepwise linear regression was performed to understand the relation between the self-reported outcomes and the HA usage pattern.

Results: The HA users were stratified into regular users, situational users or non-users, and non-users from the available responses to the two questions related to HA use. The results showed distinct usage patterns in the latent classes derived from situations where users always took off their HAs (situational non-use) and always put on their HAs (situational use). The hearing loss, demographics, socio-economic indicators, and user-related factors were found to relate to the HA usage pattern. The results showed that the HA users who reported using the HAs all the time (regular users) had better self-reported HA outcomes than situational users, situational non-users, and non-users.

Conclusion: The study explained the underlying HA usage pattern from self-reported questionnaires. The latent class analysis revealed distinct HA use patterns. The study established the relationship between HA usage patterns and audiometric factors, hearing-related factors, HA-related factors, and socio-economic indicators. The results emphasized the importance of regular use of HAs for a better outcome.

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Keywords: hearing aid usage pattern, self-reported outcomes, hearing aids

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