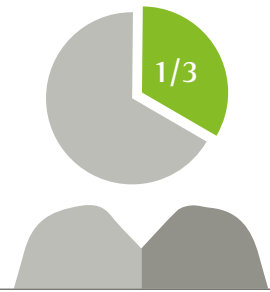


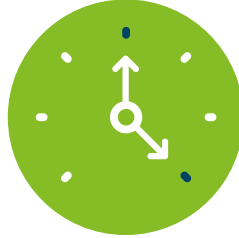
Time of Day and Hearing Aid Adoption¹

Even though hearing loss results in negative consequences in economic, physical, cognitive, psychosocial, emotional, and behavioral domains, less than **1/3 of individuals²** who could potentially benefit currently use hearing aids.



Objective:

Determine whether there is an **association between the time of day** at which an audiology appointment is scheduled **and hearing aid adoption**.



Hypothesis: **Lower hearing aid adoption** will be observed at times of the day when meal consumption takes place (noon) or is about to take place (4 p.m.).

Data collection:

Review of records of **24,842** adult patients

First-time patients

Recommendation for at least one hearing aid



Question:



Did the patient decide to try hearing aids?

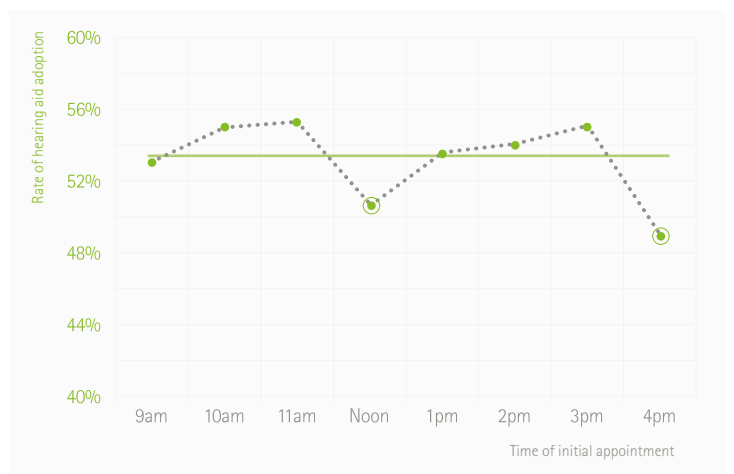
Time of day for the appointments: 9, 10, and 11 a.m., noon, 1, 2, 3, and 4 p.m.



Results:

A **significant association** was observed **between hearing aid adoption and the time of the day:**

- ▶ tendency to not pursue hearing aids at noon and at 4 p.m.



Discussion:

Due to the non-experimental nature of the methodology, the reasons for the observations above cannot be established for certain. However, there are some possible reasons:

Risk Aversion Hypothesis³

Purchase of a hearing aid is considered a risk (e.g. benefit, cost, stigma).

- » Previous research suggests that people are less likely to take a risk when hungry.
- » Appointments at noon and 4 p.m. are times of day when food consumption is about to take place.



favored ✓

Clinician Behavior Hypothesis⁴

At certain times of day, clinicians could exhibit behaviors which could influence the decision positively or negatively.

- » Clinicians could be tired or in a hurry to finish before lunch / at the end of the day at noon and 4 p.m.
- » Clinicians could have less time for the patient at noon and at 4 p.m.



possibly ?

Pre-Existing Differences Hypothesis⁵

There might be differences between those who select appointment times at different times of day.

- » Younger individuals could select appointments at noon or 4 p.m. to better fit their work schedules.
- » This group of patients may be less likely to adopt hearing aids due to milder hearing loss or more concern over stigmatization.
- » However, analyses showed that this group was not significantly different in age or degree of hearing loss.



less likely ✗

This study shows that patients are less likely to proceed with hearing aids if their initial evaluation is scheduled at mid-day or end of the day. Further research is needed to fully understand the reasons behind these findings. In the meantime, clinicians should consider time of day when scheduling appointments, in order to maximize the chance of healthy hearing outcomes for their clients.

¹Singh, G. & Launer, S. (2018). Time of day and hearing aid adoption. Trends in Hearing, 22, 1-14.

²Kochkin, S. (2007). MarkeTrak VII: Obstacles to adult non-user adoption of hearing aids. Hearing Journal, 60(4), 27-43.

³Danziger, S., Levav, J. & Avnaim-Pesso, L. (2011). Extraneous factors in judicial decisions. Proceedings of the National Academy of Sciences, 108, 6889-6892.

⁴Miceli, P. J., & Wolosin, R. J. (2004). You're "running late"—now what?: Patient satisfaction, wait time and physician behavior. Orlando, FL: The World Organization of National Colleges, Academies, and Academic Associations of General Practitioners/Family Physicians.

⁵Kripke, D. F., Youngstedt, S. D., Elliott, J. A., Tuunainen, A., Rex, K. M., Hauger, R. L., & Marler, M. R. (2005). Circadian phase in adults of contrasting ages. Chronobiology International, 22, 695-709.