

iJam, iListen, iHear: iPod Use and Hearing Among College Students

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Background

- Personal Listening Devices (PLDs) have increased in popularity in recent years.
- Evidence suggests that using PLDs long-term can increase the likelihood of developing noise-induced hearing loss¹.
- Some PLD users experienced temporary threshold shifts in hearing following short periods of noise exposure².

Background, cont.

- However, college students who were exposed to PLDs and other recreational noise were found to have normal hearing thresholds and believed to be at low risk of hearing loss³.
- Danhauer et al. (2009) surveyed college students from Division I schools and found that only a small portion engaged in behaviors considered as risk factors for developing hearing loss⁴.

Purpose


- The purpose of this study was to investigate the knowledge, opinions, and behaviors of college students with respect to iPods and hearing, and to compare responses with the Danhauer et al. study.

Method

- 459 Bloomsburg University students (147 males, 312 females) completed 27-item survey adapted from the Personal Listening Device and Hearing Questionnaire by Danhauer et al. (2009).
- Two scales were used: a 6-point rating scale ranging from (1 = never to 6 = always) and a 6-point Likert scale ranging from (1 = strongly disagree to 6 = strongly agree).


Conclusions

- 92% of participants reported using an iPod.
- Male participants and nonwhite participants indicated setting iPods at higher volumes (75 to 100% of maximum volume level). This suggests that male and minority college students may be at a higher risk of developing hearing loss secondary to iPod use.
- These results could possibly be related to differences in sensory responses between males and females or other cultural differences.




Conclusions, cont.

- Students in communication-related majors were more likely to believe that noise output limiters should be placed in PLDs, suggesting that these students are more aware about hearing health than those in non-communication-related majors.
- Few participants reported symptoms related to hearing loss.
- More than 3/4 of participants reported listening with earbud-style headphones. A previous study found that users were most likely to listen at higher volume levels with this headphone style than others⁵.




Conclusions, cont.

- Nearly half of participants indicated that they were surprised from the volume setting of their previous use and over 70% reported that their volume level was affected by their mood.
- Over 90% of participants indicated turning up their iPod volume when in noisy backgrounds, consistent with previous findings⁵.



Conclusions, cont.

- Results suggest that few participants are at high risk for developing noise-induced hearing loss based on iPod use.
- Users who listen in noisy backgrounds and who use earbud-style headphones may be more in need of education about hearing loss.




Future Directions

- Obtain more balanced cultural sample for repeated study.
- Conduct longitudinal studies about hearing health.
- Implement educational awareness programs about safer PLD listening practices and the potential dangers of long-term use.



Online Link to Poster

- To view the poster online, please visit:
- <http://organizations.bloomu.edu/nsslh/a/images/iPod%20Poster%2048x36.pdf>



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