

Abstract

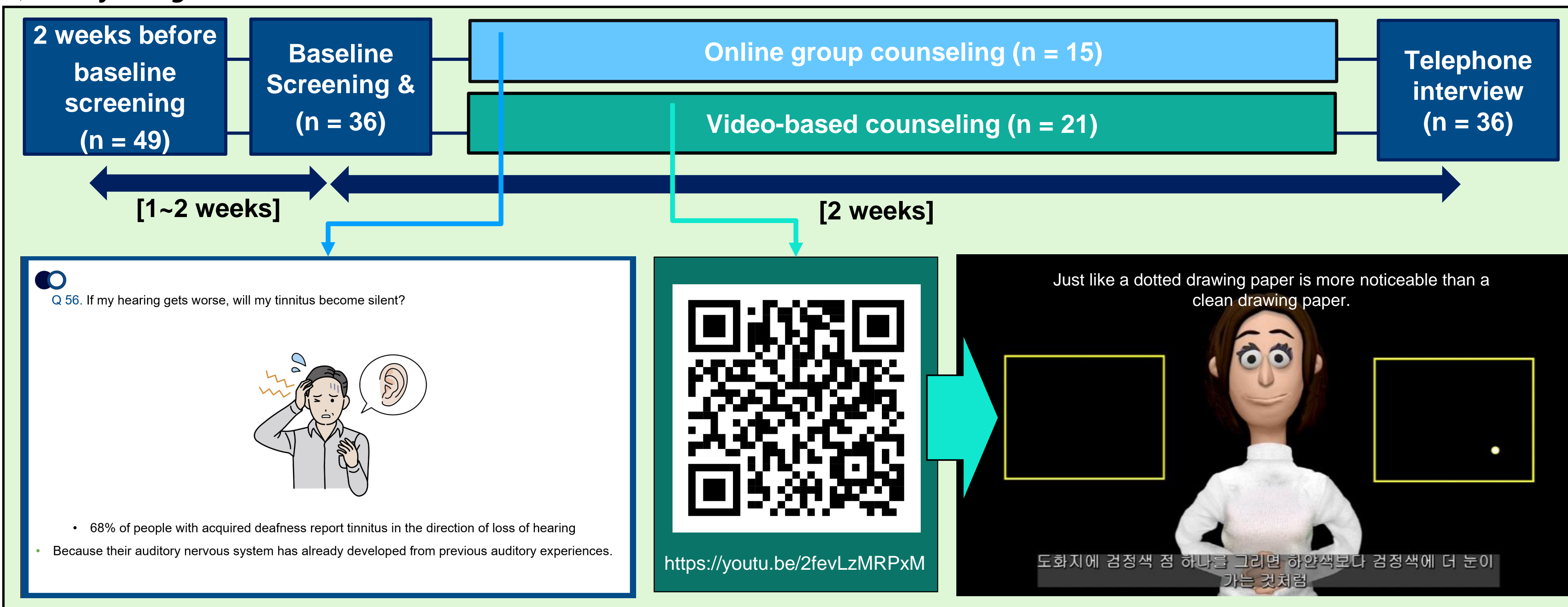
- Counseling can help alleviate tinnitus-induced emotional distress, such as irritation and worry, and correct misconceptions, making it an effective rehabilitation option for patients affected by tinnitus. Advances in communication technology have increased the demand for computer-mediated tinnitus counseling; however, the effectiveness of such counseling in reducing tinnitus is unclear.
- Thirty-six participants with tinnitus were randomly assigned to online counseling (15 participants) or video-based counseling (21 participants) groups, defining how remote counseling was conducted. Tinnitus counseling, comprising 100 items, lasted 2 weeks and was separated into six sessions for the online counseling group and 8–9 items daily for the video-based counseling group.
- While no significant improvements were observed in other domains, average emotional aspect-related scores showed significant improvements in both groups.

Objectifs

- This study aimed to determine the tinnitus relieving effects of computer-mediated educational counseling (online vs. video-based counseling).

Méthodes et Matériels

Study design

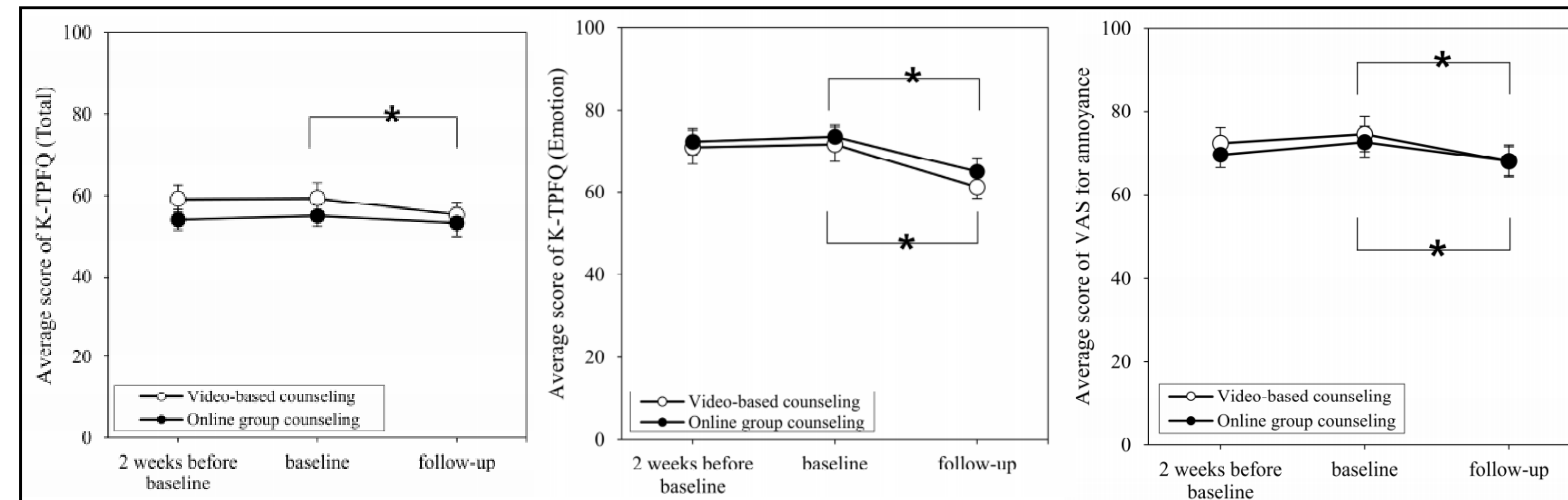


[Figure 1] Protocol of the present study.

- The present study was conducted for 2 weeks to determine the effectiveness of remote counseling in alleviating tinnitus through two different methods—online group counseling vs. video-based counseling. Therefore, no other tinnitus treatment or rehabilitation beyond counseling was provided during this study.
- For the materials used in the online group counseling, the 100 counseling items were divided into six PowerPoint materials (Microsoft Corporation, Redmond, WA, USA). Each counseling session consisted of 16–17 questions and answers, and the answers were accompanied by at least one visual to enhance the participants' memory.
- For the video-based counseling group, 100 educational counseling videos were created using Adobe Character Animator (Adobe System Inc., San Jose, CA, USA). The videos are organized such that they first show the question to be addressed in the video, and then the counselor character narrates the answer to the question. At least one or two visual examples were included in the videos to enhance the participant's memory of the answer.

Results

Both groups showed improvements mainly in emotional aspects



[Figure 2] Change in average K-TPFQ and VAS scores over time for the two study groups. K-TPFQ = Korean version of the Tinnitus Primary Function Questionnaire. VAS = Visual analog scale * Asterisks indicate statistical significance.

- The total K-TPFQ score exhibited a non-significant change from 54.92 to 53.17 in the online counseling group ($t = 1.283, p = 0.220$), whereas the video-based counseling group had a significant change from 59.35 to 55.16 ($p = 0.001$).
- Comparing the average scores between baseline and follow up on the emotion subcategory of the K-TPFQ, both online counseling and video-based counseling groups showed significant decreases from 73.53 to 65.07 ($p = 0.001$) and from 71.71 to 61.26 ($p < 0.001$), respectively.
- Comparing baseline with follow-up VAS scores for annoyance, the online counseling and video-based counseling groups showed significant decreases from 72.67 to 68.13 ($t = 2.220, p = 0.043$) and from 74.52 to 68.10 ($p = 0.017$), respectively.

Conclusion

- The present study showed that tinnitus educational counseling, delivered through online group counseling and viewing video content, can contribute to alleviating the negative emotional impact of tinnitus.

Références

- Henry, J. A., Loovis, C., Montero, M., Kaelin, C., Anselmi, K. A., Coombs, R., ... & James, K. E. (2007). Randomized clinical trial: group counseling based on tinnitus retraining therapy. *Journal of Rehabilitation Research & Development*, 44(1).
- Henry, J. A., Zaugg, T. L., Myers, P. J., ... & Carlson, K. F. (2012). Pilot study to develop telehealth tinnitus management for persons with and without traumatic brain injury. *Journal of rehabilitation research and development*, 49(7), 1025–1042.
- Schlee, W., Neff, P., Simoes, J., Langguth, B., Schoisswohl, S., Steinberger, H., ... & Prüss, R. (2022). Smartphone-guided educational counseling and self-help for chronic tinnitus. *Journal of clinical medicine*, 11(7), 1825.
- Jin, T. J., Sim, Y., & Jin, I. K. (2023). Investigation of Tinnitus Counseling Requirements and Derivation of Counseling Topics through Focus Group Interviews with Tinnitus Patients. *Audiology and Speech Research*, 19(3), 179-189.