

As the population ages, more and more people are interested in how they can stay cognitively active in hopes of warding off general cognitive decline, memory loss, and even dementia. As a result of this demand, there are many programs being developed to “train” working memory and other types of cognition. A common task used in many of these training programs is the n-back task.

Complete the Assignment 4 n-Back Demonstration. Make sure to score the accuracy of your responses and compare your performance on the two versions of the task that are presented in the demo.

The goal of this assignment is to review some of the research on the n-back task in order to evaluate whether it’s useful for cognitive training. Imagine that your Grandma wants to know what she can do to stay sharp and you want to help by presenting her with an evaluation of this task. By reviewing some of the research and programs available, you can provide a recommendation on whether practicing the n-back will increase her working memory ability, and subsequently, aid her in other cognitive activities.

1. Find TWO sources describing the use of the n-back in training working memory and/or cognition. Possible sources include the following (make sure your two sources are of different types). See the Research Help tab in Blackboard to access the KU Library site where you can search online.
 - a. An article located using a psycINFO or Web of Science search—find these under “Databases” on the Library website
 - b. A popular press report (e.g., newspaper, magazine, website, etc.)—Library or Google
 - c. An online training program using the n-back task as part of its training—Google
2. For each of your two sources, include the following:
 - a. Include a reference for the article or website (use APA style: <http://www.writing.ku.edu/~writing/guides/apa.shtml>)
 - b. Write a brief summary of what the article was about, what the author(s) concluded, what they were trying to determine, what the training is trying to accomplish, etc.
 - c. Identify the intended audience for the article, website, or training program
 - d. What are the qualifications of the author(s) or developer(s) of the program
 - e. Identify the motive (why did the author write the article, why are the developers offering the program, etc.)
3. Make a recommendation to Grandma. Consider the following:
 - a. What general information did you find about the task and programs?
 - b. Do you think practicing the n-back task is useful for her in staying sharp as she ages?
 - c. How does training working memory (e.g., through using n-back) help her general cognitive functioning? What is important about working memory in cognition?
 - d. Should Grandma purchase or subscribe to a training program or are there other viable options for activities that she can do on her own for free?
4. Lastly, report your accuracy (percent correct) for the two versions of the n-back task that you completed in the demonstration.
 - a. Briefly describe your impression of this version of the task. Did you find it easy or difficult and in what way?
 - b. Are there other versions of the task that you found during your research that you think would be better for Grandma to use as compared to the one you completed?