

Colorado Probation Research in Brief

Effects of Speech Clarity on Recognition Memory for Spoken Sentences

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Key Words: Speech, memory, verbal communication, clear speech, conversational speech

Summary/Conclusions

The current study examined how clear speech impacts memory retention of verbal communication. In two experiments researchers had volunteers listen to sentences that were either spoken clearly or conversationally and either logical or abstract. The study found that clear speech was better understood and easier to recall than conversational speech. Researchers hypothesize that instances where there is less effort required to listen to a message, it is easier to understand and recall from memory.

Limitations of Information

The current study did not account for important factors that are related to the complex process of how the brain encodes and retrieves memories. All study participants were students between the ages of 18 – 31 and the study did not report gender information. It is unclear if the results could be reproduced with a different demographic. The sample size of the study was small. Additionally, the voice used in the recordings was female, it is unclear if a male voice would produce similar results.

Caveat: The information presented here is intended to summarize and inform readers of research and information relevant to probation work. It can provide a framework for carrying out the business of probation as well as suggestions for practical application of the material. While it may, in some instances, lead to further exploration and result in *future* decisions, it is not intended to prescribe policy and is not necessarily conclusive in its findings. Some of its limitations are described above.

Communicating Expectations Clearly

Communication is a vital part of our daily lives. The ability to recall verbal messages is an important aspect of communication. Researchers wanted to test if messages spoken clearly were easier to understand and later recall than informational that was expressed in a conversational manner.

Researchers recruited individuals from the University of Texas to participate in two separate experiments. A voice actor recorded a series of sentences. For clear speech, the voice actor was instructed to talk as if she was speaking to someone who had difficulty hearing. For conversational speech, the voice actor was told to talk as if she was speaking to someone familiar with her voice and speech patterns. The recordings were either of sentences that were logical (e.g. the dog ate the food) or abstract (e.g. the sun smiled upon you). In the first experiment, 18 participants listened to audio recordings with noise added. Researchers grouped sentences into two types (logical or abstract) and played 40 clips of each type. Participants were asked to write as much of each sentence as he or she could understand. For the second experiment, researchers played 40 random (20 clear speech, 20 conversational) clips, without noise, for 33 individuals. After participants listened to the recordings, they were shown sentences and asked to identify if it was a new sentence or from the recordings.

The results of the experiments illustrated that clear and meaningful speech was better understood and recalled than

speech that was conversational and abstract. It is important to note that clear speech was better understood and better recalled than conversational speech in both logical and abstract sentences. Logical sentences also helped individuals understand and recall verbal information.

Practical Applications:

- ✓ When communicating information and instructions, be clear and concise. Use pauses, variation in tone, and distinct words to help the receiver understand and remember the details.
- ✓ Provide information in a clear and organized fashion.
- ✓ Avoid extraneous words and present information that matches the individual's understanding.
- ✓ Be mindful of information overload. Too many topics may impede a person's ability to retain information.
- ✓ Check for understanding. People with hearing issues, TBIs, learning disabilities may struggle with retaining information.
- ✓ Noisy environments require additional effort to process and remember information. When meeting with probationers, try to find quiet locations free from other conversations and background noise. It might be helpful to turn off music and fans during appointments.
- ✓ Keep in mind that your verbal communication skills may assist probationers with remembering expectations and assignments.
- ✓ In addition to verbal instruction/info, some people will need to write things down to fully recall details.