

# The voice in your head may help you recall and process words. But what if you don't have one?

May 29 2024, by Derek Arnold



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Can you imagine hearing yourself speak? A voice inside your



head—perhaps reciting a shopping list or a phone number? What would life be like if you couldn't?

Some people, including me, cannot have imagined <u>visual experiences</u>. We cannot close our eyes and conjure an experience of seeing a loved one's face, or imagine our lounge room layout—to consider if a new piece of furniture might fit in it. This is called "aphantasia," from a Greek phrase where the "a" means without, and "phantasia" refers to an image. Colloquially, people like myself are often referred to as having a "blind mind."

While most attention has been given to the inability to have imagined visual sensations, aphantasics can lack other imagined experiences. We might be unable to experience imagined tastes or smells. Some people cannot imagine hearing themselves speak.

A <u>recent study</u> has advanced our understanding of people who cannot imagine hearing their own internal monolog. Importantly, the authors have identified some tasks that such people are more likely to find challenging.

#### What the study found

Researchers at the University of Copenhagen in Denmark and at the University of Wisconsin-Madison in the United States <u>recruited 93</u> <u>volunteers</u>. They included 46 adults who reported low levels of inner speech and 47 who reported high levels.

Both groups were given challenging tasks: judging if the names of objects they had seen would rhyme and recalling words. The group without an inner monolog performed worse. But differences disappeared when everyone could say words aloud.



Importantly, people who reported less inner speech were not worse at all tasks. They could recall similar numbers of words when the words had a different appearance to one another. This negates any suggestion that aphants (people with aphantasia) simply weren't trying or were less capable.

### A welcome validation

The study provides some welcome evidence for the lived experiences of some aphants, who are still often told their experiences are not different, but rather that they cannot describe their imagined experiences. Some people feel anxiety when they realize other people can have imagined experiences that they cannot. These feelings may be deepened when others assert they are merely confused or inarticulate.

In my own <u>aphantasia research</u> I have often quizzed crowds of people on their capacity to have imagined experiences.

Questions about the capacity to have imagined visual or audio sensations tend to be excitedly endorsed by a vast majority, but questions about imagined experiences of taste or smell seem to cause more confusion. Some people are adamant they can do this, including a colleague who says he can imagine what combinations of ingredients will taste like when cooked together. But other responses suggest subtypes of aphantasia may prove to be more common than we realize.

The authors of the recent study suggest the inability to imagine hearing yourself speak should be referred to as "anendophasia," meaning without inner speech. Other authors had suggested <u>anauralia</u> (meaning without auditory imagery). Still other researchers have referred to all types of imagined <u>sensation</u> as being different types of "imagery."

Having consistent names is important. It can help scientists "talk" to one



another to compare findings. If different authors use different names, important evidence can be missed.

## We have more than five senses

Debate continues about how many senses humans have, but some scientists reasonably argue for a <u>number greater than 20</u>.

In addition to the five senses of sight, smell, taste, touch and hearing, lesser known senses include thermoception (our sense of heat) and proprioception (awareness of the positions of our body parts). Thanks to proprioception, most of us can close our eyes and touch the tip of our index finger to our nose. Thanks to our vestibular sense, we typically have a good idea of which way is up and can maintain balance.

It may be tempting to give a new name to each inability to have a given type of imagined sensation. But this could lead to confusion. Another approach would be to adapt phrases that are already widely used. People who are unable to have imagined sensations commonly refer to ourselves as "aphants." This could be adapted with a prefix, such as "audio aphant." Time will tell which approach is adopted by most researchers.

## Why we should keep investigating

Regardless of the names we use, the study of multiple types of inability to have an imagined sensation is important. These investigations could reveal the essential processes in human brains that bring about a conscious experience of an imagined sensation.

In time, this will not only lead to a better understanding of the diversity of humans, but may help uncover how human brains can create any conscious sensation. This question—how and where our conscious



feelings are generated—remains one of the great mysteries of science.

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