

# A VIRTUAL MEMORY PALACE TO FACILITATE MEMORIZING INFORMATION

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## Background

The method of loci is a mnemonic techniques discovered by ancient Greek and roman philosophers.

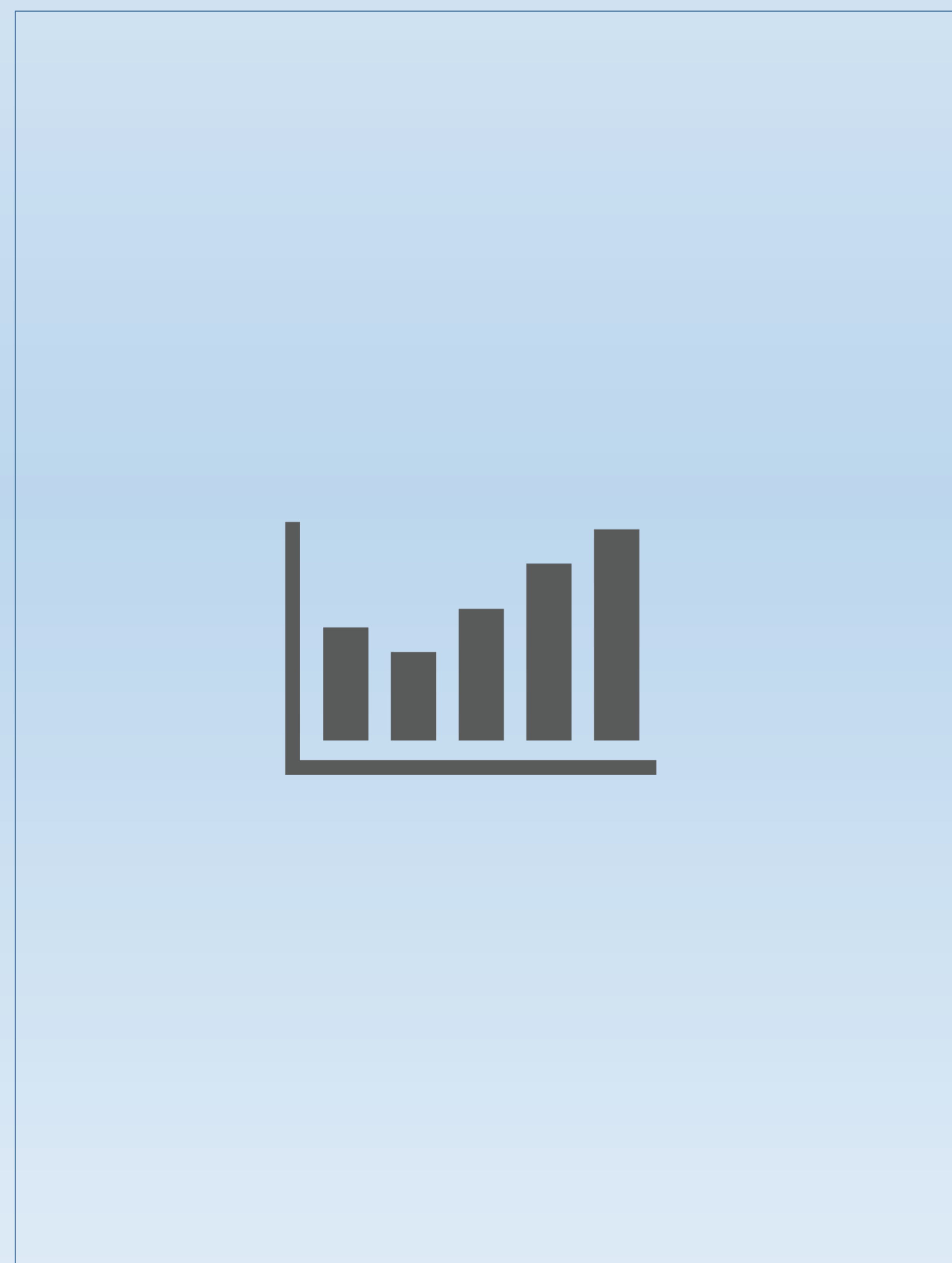
It leverages our spatial memory by associating objects, ideas or concepts with locations in an imagined “memory palace”.



The above screenshot shows the system during memorization mode. It was created using Blender and Unity 5.

## Research Question

Can we use virtual reality to help us memorize information in a virtual memory palace?



## Goals & Focus

Can a virtual memory palace make using the method easier.

Users don't need to 'construct' and memorize their own memory palace.

Eliminates the need for a powerful and active imagination.

## Other Questions

Does a virtual memory palace lower effort or reduce the time required for memorization?

Can we use virtual environments to train users to use a memory palace increasing their performance with the technique?

## Results

## Experiment Design

- Uses a artificial testing environment built in Unity.
- Within subject experiment of 6 participants.
- Each subject is asked to memorize 10 digits over a 10 second trial ( 2 sets of 5 trials )

### Independent

1. VR Memory Palace
2. Imaginary Memory Palace
3. No Memory Palace

### Dependent

1. Recall accuracy