

The link Between Memory and Studying

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Introduction

Memory plays a crucial role in education, and different study methods can influence how well information is remembered. The most common method is rereading your notes, but this is not the best for many reasons. Methods like flash cards promote memorization as it practices active recall. The experiment aims to identify the effect of different study methods on memorization. To conduct this investigation, 10 people in total will be tested aged around 14 - 15 years old. Each person will be given 10 minutes to memorize a list of 15 words using a specified study method, they will then be tested and given a score out of 15. They will repeat 2 times with each having different study techniques and a different list of words

Aim

To determine the effect of 3 different study methods (scribble method, flash cards, reading notes) on memorising a list of 15 words

Hypothesis

If the study method of using flash cards to remember a list of words then it will have the highest average score when compared to the scribble method or reading notes because flash cards practice active recall which helps improve memorization.

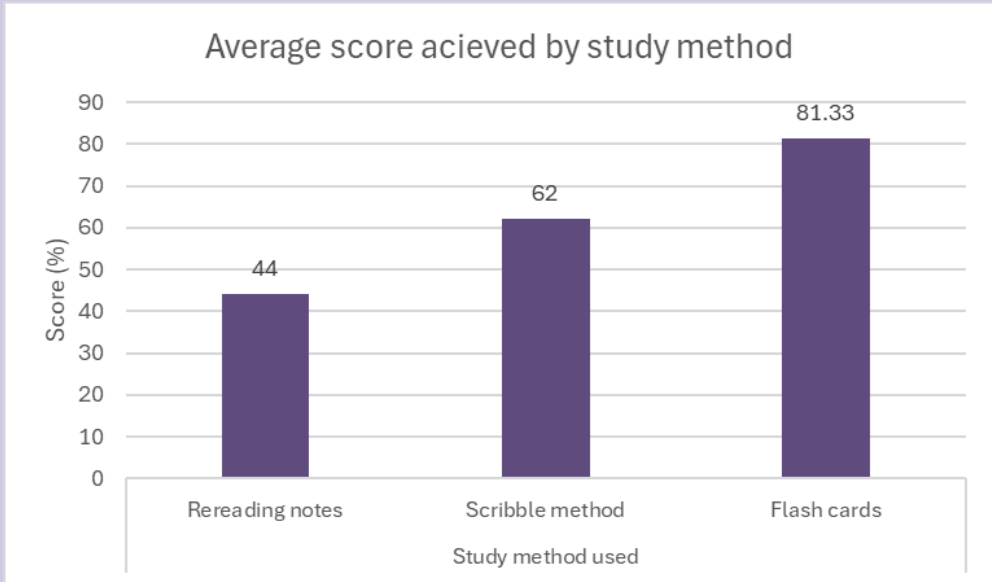
Variable

Control V	<ul style="list-style-type: none">List of words (changes depending on study method)Time allotted to study (10 minutes)Time allotted for test (5 minutes)
Dependent V	<ul style="list-style-type: none">A score out of 15
Independent V	<ul style="list-style-type: none">The study method used (Flash cards, rereading notes, and

Procedure

- given a random list of 15 words and a study method to use to memorize the words.
- 10 minutes to study these words then they will be tested.
- 5 minutes to write down as many words as they remember
- They will repeat this 2 more times with different words and study methods

	Rereading notes	Scribble method	Flash cards
P1	46.7	66.7	86.7
P2	40	60	80
P3	60	73.3	93.3
P4	33.3	53.3	80
P5	46.7	66.7	86.7
P6	40	60	73.3
P7	53.3	66.7	80
P8	33.3	53.3	73.3
P9	46.7	60	73.3
P10	40	60	86.7



Analysis

It can be observed that in a memory performance test across the three different study methods, flash cards produced the highest average recall (81.33%), followed by the scribble method (62%), and rereading notes performed the lowest (44%). This suggests that more active, engaging study techniques like flash cards and scribbling help improve memory retention compared to passive rereading of your notes. Flash cards likely helped through repetition and self-testing, while the scribble method encouraged deeper processing. In contrast, rereading relied on recognition rather than recall, which may have limited memory retention.

Conclusion

This investigation aimed at observing the effect of using different study methods on memory. Overall, the experiment suggests that active study methods such as flash cards or the scribble method lead to better memory performance than passive ones such as rereading notes. Flash cards proved to be the most effective tool for remembering information, supporting the idea that testing yourself improves recall. The scribble method also enhanced performance but not as strongly, while rereading notes was the least effective. These results support research that shows active recall practice and active engagement help strengthen memory.

Limitations

However, this study had several limitations. The small sample size of 10 participants means the findings may not accurately represent a larger population. Additionally, the data was limited to short-term memory of a single 15-word list, which does not show how these methods perform with different types of content or over longer periods. The results may also be influenced by participant effort, prior experience, or motivation. Future studies should include more participants, measure long-term retention, and test different subjects to gain more reliable data.

Resources

Collin The Chad (2024). study tips that ACTUALLY work. [online] YouTube. Available at: <https://www.youtube.com/watch?v=HZHbHL0dbnw>.
Stinn, S. (2024). Doodling Study Method #doodle #study #learning. [online] www.youtube.com. Available at: <https://www.youtube.com/shorts/WtplxJgVGJ4> [Accessed 2 Nov. 2025].
Xu, J., Wu, A., Filip, C., Patel, Z., Bernstein, S.R., Tanveer, R., Syed, H. and Kotroczo, T. (2024). Active Recall Strategies Associated with Academic Achievement in Young adults: a Systematic Review. Journal of Affective Disorders, [online] 354(1), pp.191–198. doi:<https://doi.org/10.1016/j.jad.2024.03.010>.

