Hypothesis:

As ___use of spaced repetition (versus massed practice)___ [increases/decreases], <u>24-hour delayed vocabulary</u> recall [increases/decreases].

Objective Data:

Data To Be Collected	Units or Scale	Expected Range of Values	Collection Frequency or Times	Collection Method	Additional Information (Specifics!)
Date & Time	Hour	7am-10pm	████	████	████
Study time	Minutes	~0.5–60	Per study session	Timer/app logs	Only active study time (exclude test).
Error count	Count	0-20	Per recall	Count of non-target words	Record intrusion type if possible.
Delayed recall correct count	Count	0-20	24 hrs after study (per trial)	Free recall test, 2-min timed Target list	20 words; only exact matches scored.

Subjective Data:

Data To Be Collected	Units or Scale	Expected Range of Values	Collection Frequency or Times	Collection Method	Additional Information
Self-rated recall confidence	Scores 0–10	0-10	After each recall	Self-rating immediately post	Compare confidence with accuracy; note distractions

The primary goal of this project is to compare the effectiveness of different memorization strategies on vocabulary retention measured after 24 hours. I will quantify both learning outcomes (immediate and delayed free-recall scores) and the time-cost of each method so I can evaluate trade-offs between efficiency and long-term retention. Secondary goals are to track error patterns (intrusion errors) and to assess subjective confidence in recall, which may reveal metacognitive differences between methods. Ultimately I want to identify which strategy (or strategies) give the best retention per unit study time for future language-learning practice.