

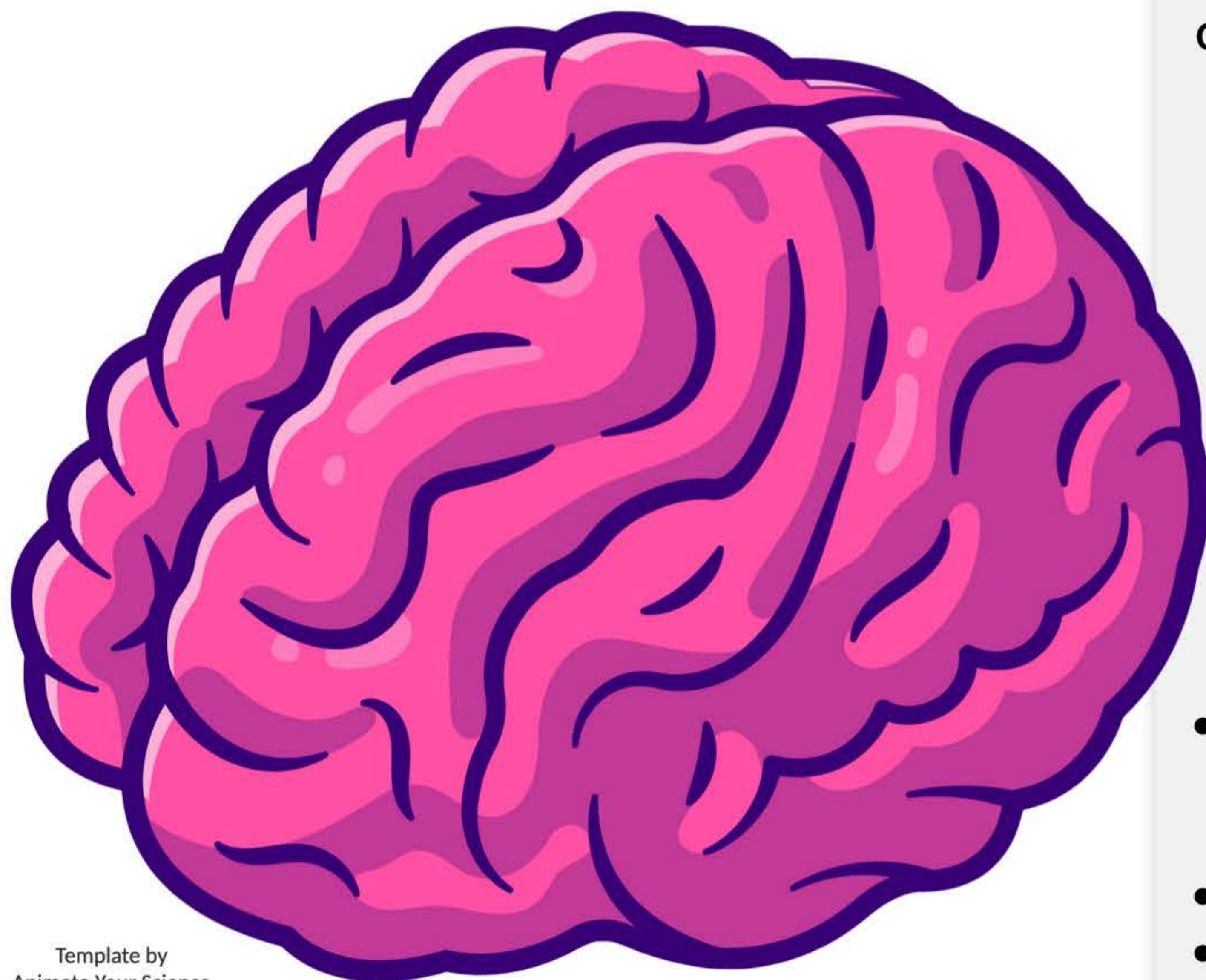
Motivation and Memory: The Role of Reward on Encoding and Retrieval

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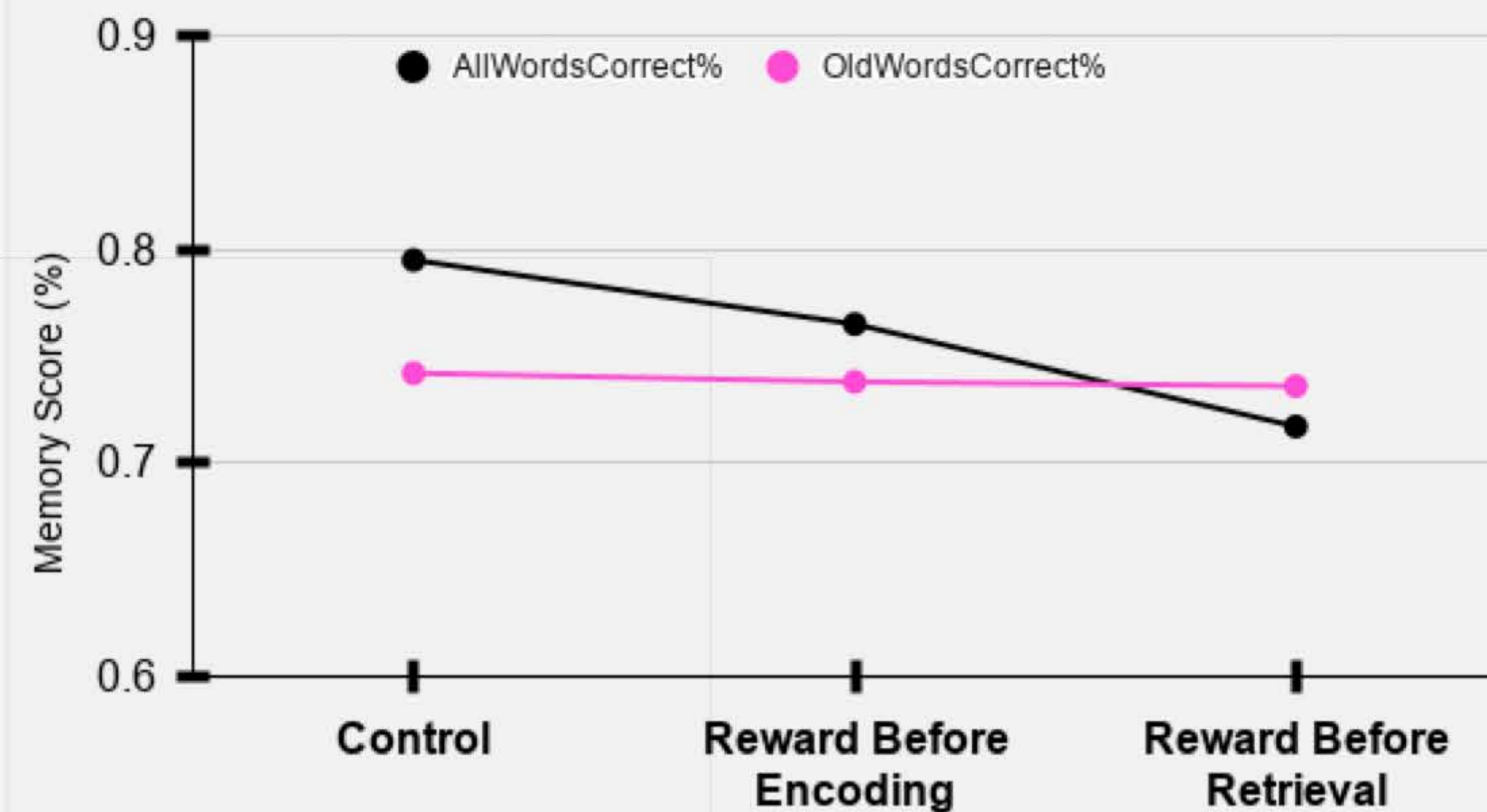
BACKGROUND

- Extrinsic motivation (i.e. reward) is shown to have an effect on memory performance^{2, 3, 4, 5, 6, 7, 8, 10}
- High reward value⁹, and predictable delivery¹ boosts this effect
- It is unclear how the timing of the reward interacts with memory
- We tested 38 participants (27 female, 11 male), with an average age of 20.68
- We used a lottery ticket as a reward

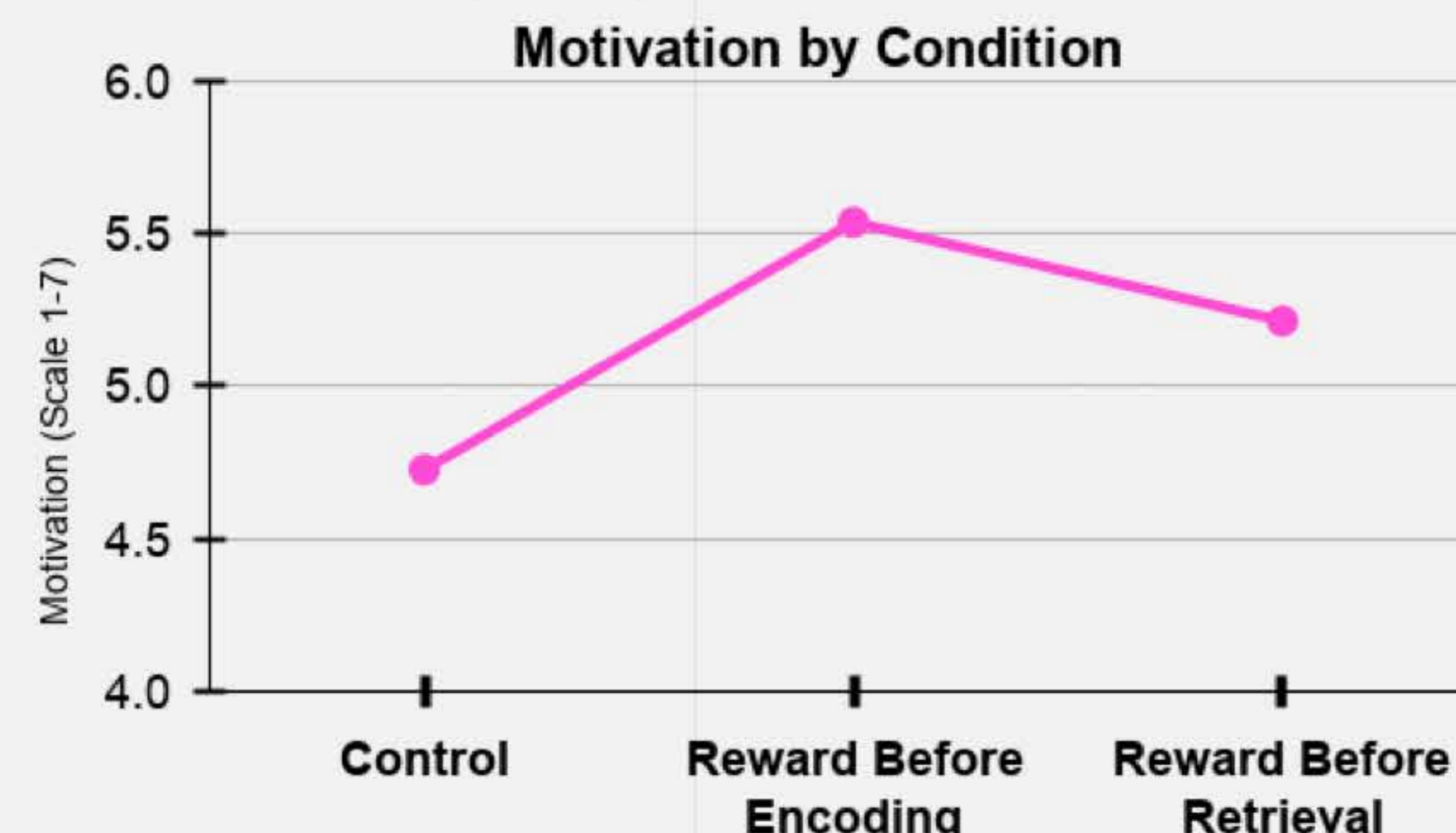


KEY FINDING

Memory Score by Experimental Condition



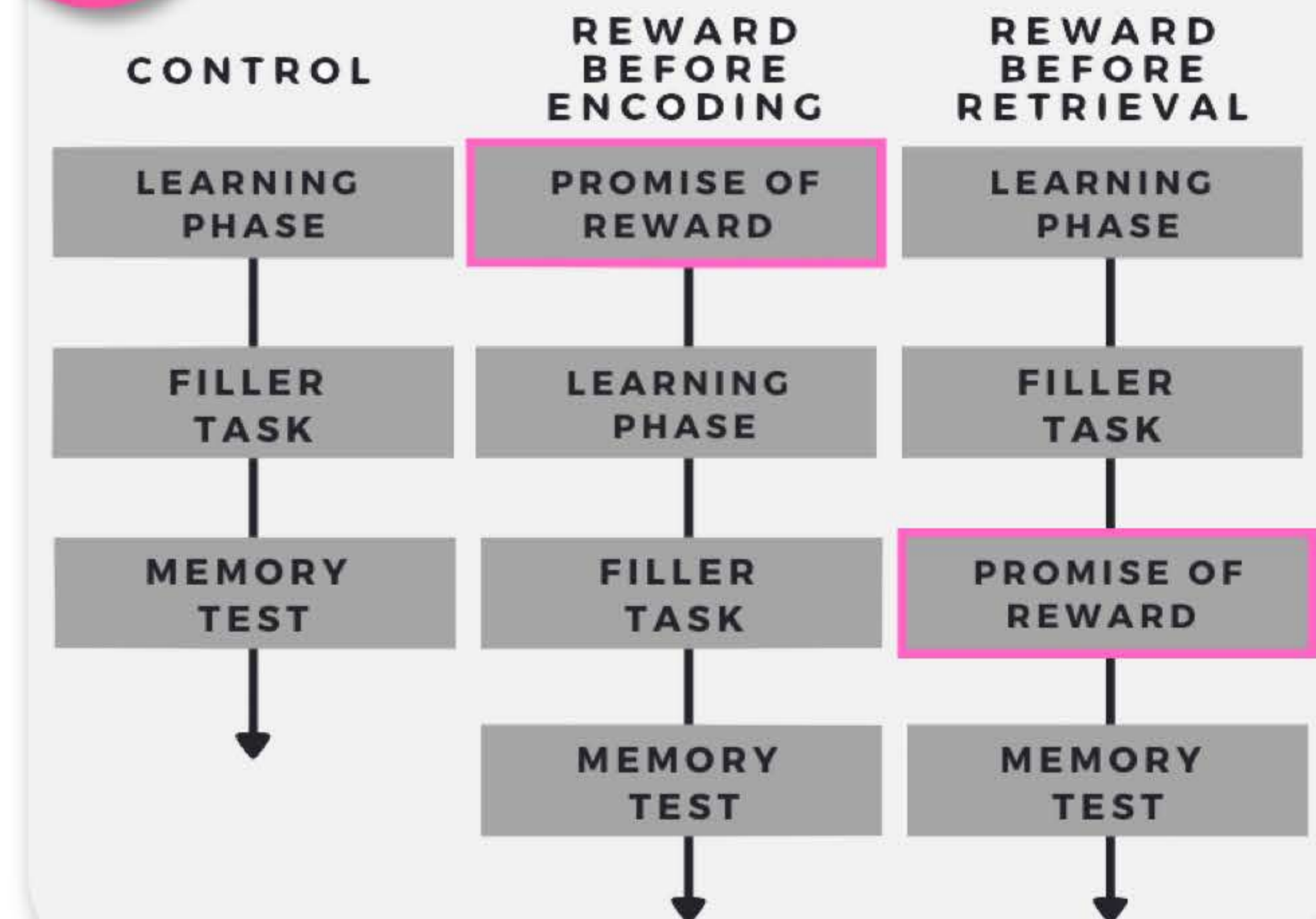
A one-way ANOVA revealed no significant difference in overall memory score between experimental conditions, $F(2,35) = 1.53, p = 0.23$



- A one-way ANOVA did not demonstrate a significant difference in motivation between experimental conditions, $F(2, 35) = 1.12, p = 0.34$
- This is likely the reason for no difference in memory score
- The means were consistent with our predication so it is possible that the study was simply underpowered and we did not have a large enough sample size



EXPERIMENTAL CONDITIONS



TAKE-AWAY

- It is still unclear how the timing of reward impacts memory performance
- This study should be replicated with a stronger reward and larger sample size



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References



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