



The Effects of Narrative on Memory Through Seinfeld

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Introduction & Background

Retrieval Induced Paradigms have been studied in the past by using word lists for experimentation, in which participants are given word associations to remember.

- RP+ conditions are the only ones practiced
- RP- conditions are closely related to RP+
- NRP conditions consist of the same task, but an unrelated subject
- There has been substantial evidence to indicate that with the increased remembrance of RP+, there is a decreased remembrance of RP-
- This indicates that competition of RP+ and RP- drives inhibition, and inhibition drives forgetting, supporting the phenomena of Retrieval Induced Forgetting (RIFO).

Encoding	Retrieval Practice	Final Test
Fruit → Orange	Fruit → Or__	Fruit → Or__ (RP+)
Fruit → Banana	Unpracticed	Fruit → Ba__ (RP-)
Tree → Birch	Unpracticed	Tree → Bi__ (NRP)

Storm et al., 2015

Fig. 1: Example of Retrieval Induced Forgetting Paradigm done in an experiment by Storm et al. 2015.

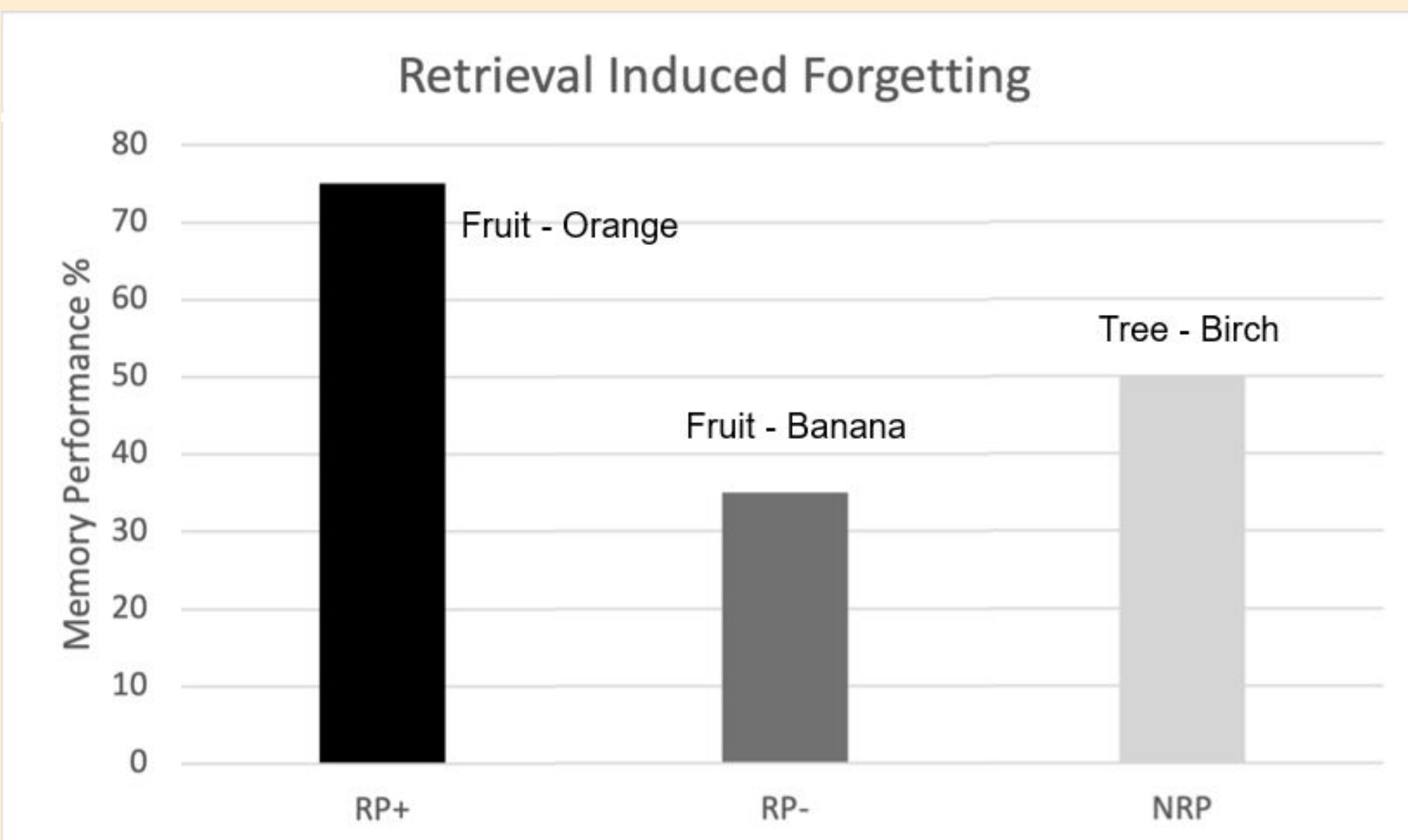


Fig. 2: Visual results of the experiment above, in which we can observe the “U” shaped pattern that illustrates Retrieval Induced Forgetting in this experimental approach.

Retrieval & Encoding Task

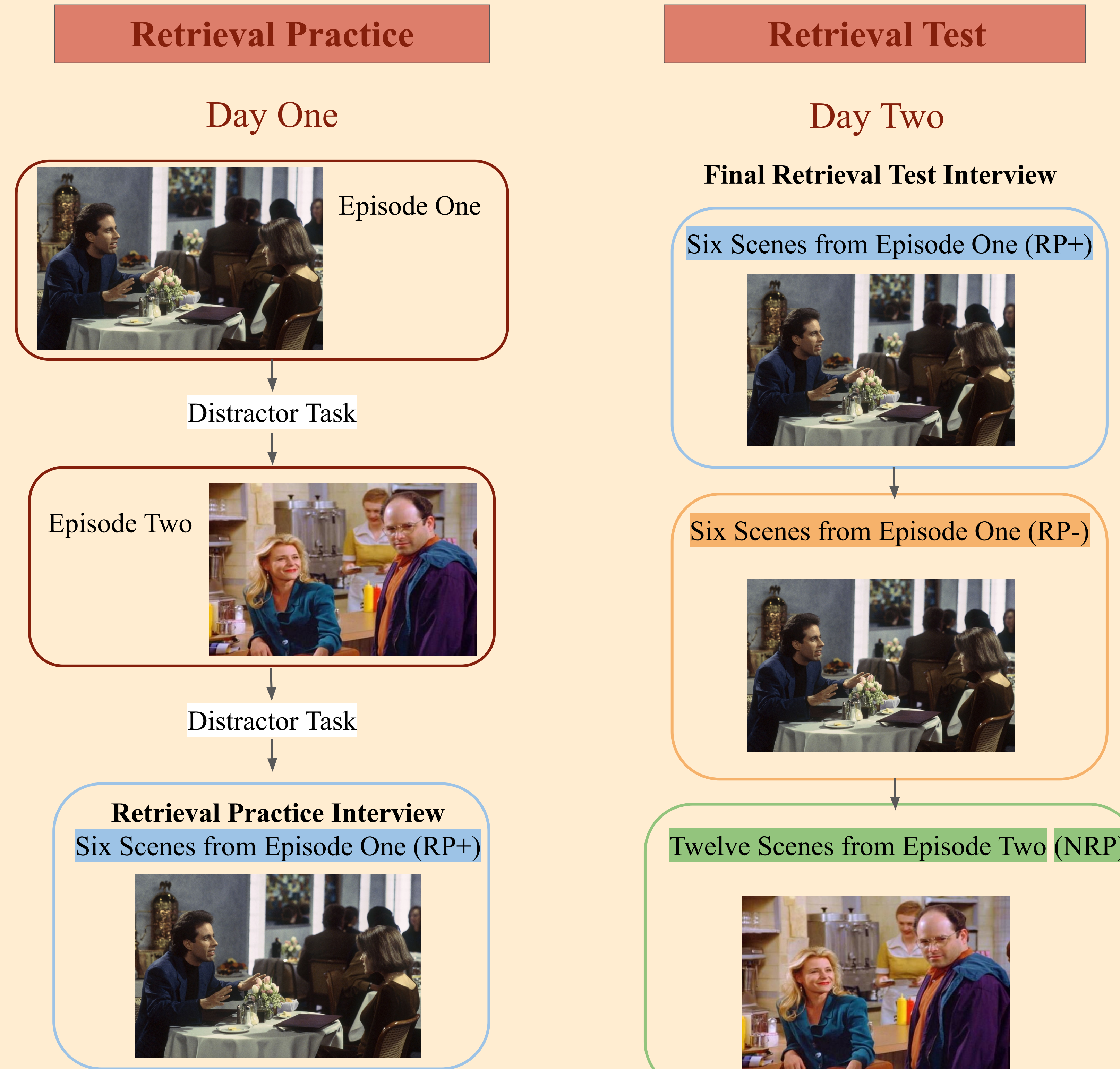


Fig. 3: Visual Representation of the order of events for the methodology of both retrieval practice and testing

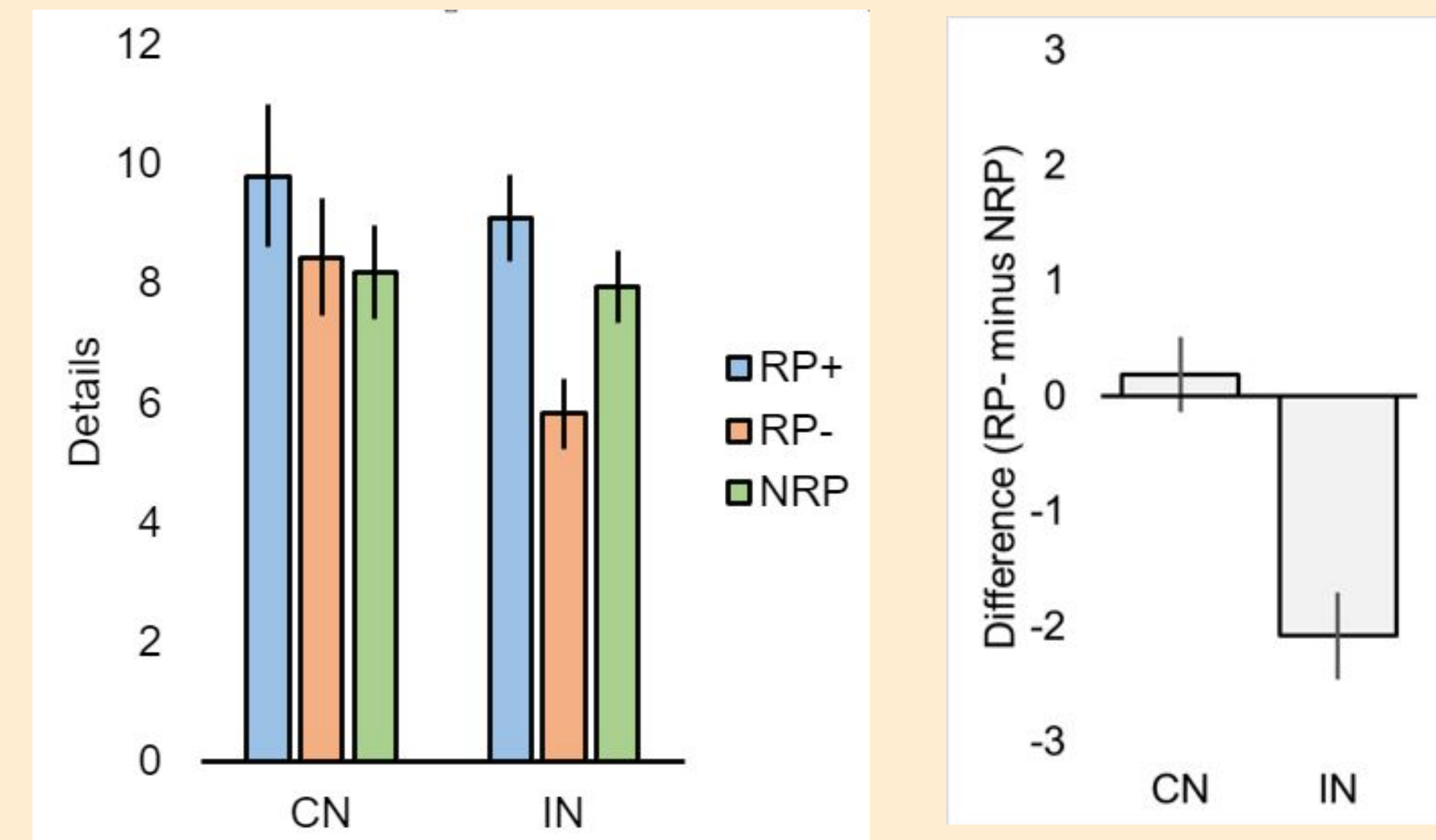
Transcription & Scoring

Scene 8 Cue: George finds the suit that he hid
 Scene 8 Response: He found the suit... /rc/ umm... him and the guy /ppl/ that also wanted the suit... they're waiting outside the store, /loc/ then when they came in, the guy went to the normal rack that the suit was on, /ed/ but Jerry went... I mean George went forward to the rack that was in front of the door /per/ and um he got the suit out of that rack, /rc/ and um the guy accused him of hiding it or misplacing /ed/ it and um then he bought the suit for half price /ed/ that's about it.

- Types of details:
- Event details (general details)
 - Quotes
 - Location
 - People
 - Perceptual
 - Repeated Cue
- Other details not shown:
- Narrative Connections /nc/
 - Intrusions /ir/ /in/ /ie/
 - False Memories /fm/

Fig. 4: An example of a transcribed response with color coded scoring patterns.

Narrative Protects Against Retrieval Induced Forgetting



- Our results show a significant condition by trial type
- This indicates that narrative protects against RIFO
- Narrative drives integration, integration reduces competition, reduced competition results in less inhibition, and less inhibition results in less forgetting.

These results lead us to conclude that Naturalistic Stimuli reduce forgetting, a concept that word list based experiments could not show.

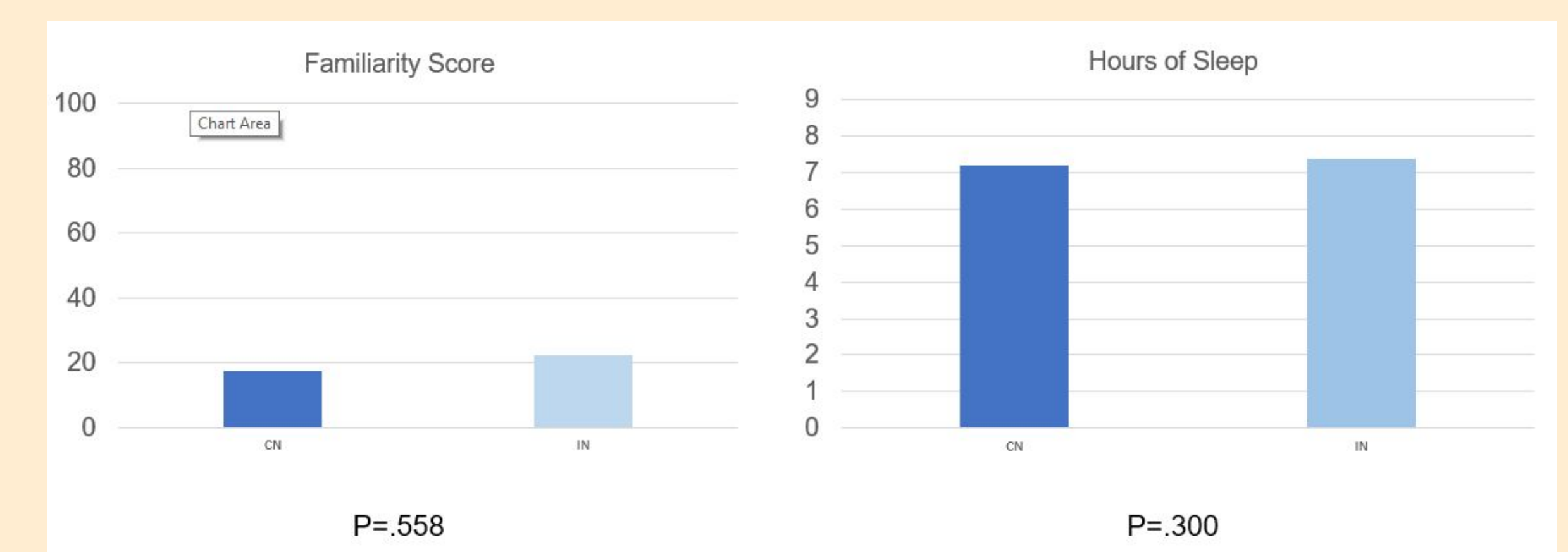


Fig. 5: Data collected of possible confounding variables

Next Steps

- We will still be comparing across Coherent and Incoherent Conditions
- On Day Two it will be a recognition task, featuring 36 scenes: six RP+, six RP-, twelve NRP, and twelve lures
- Moving forward from that we will be conducting similar experiments but within fMRI