

Complex Visual-Spatial Reproduction and Recall: Effects of Individual Differences and Information Processing Strategy Instructions

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Introduction

This project has two AIMS:

- (1) To examine the effects of personality traits on copy and recall measures of the Rey-Osterrieth Complex Figure Test (Figure 1). For example, does perfectionism influence the amount of time that individuals take in the copying portion of the ROCF?
- (2) To examine if performance accuracy on the ROCF is differentially affected by information processing strategy instructions that encourage participants to use relatively more analytic/controlled vs. non-analytic/intuitive thinking, or to try to use both modes of thinking.

Method

- Participants (N=93) were assigned to one of four instructional interventions that encouraged use of differing levels of control (LoC), differing levels of specificity (LoS), both differing LoC and LoS, or a neutral condition.
- They then performed three problem solving tasks, including the ROCF.
 - * unlimited time on the ROCF copy, immediate recall and delayed recall
 - * questionnaires between immediate and delayed recall
 - * the ROCF was scored based on the original protocol:

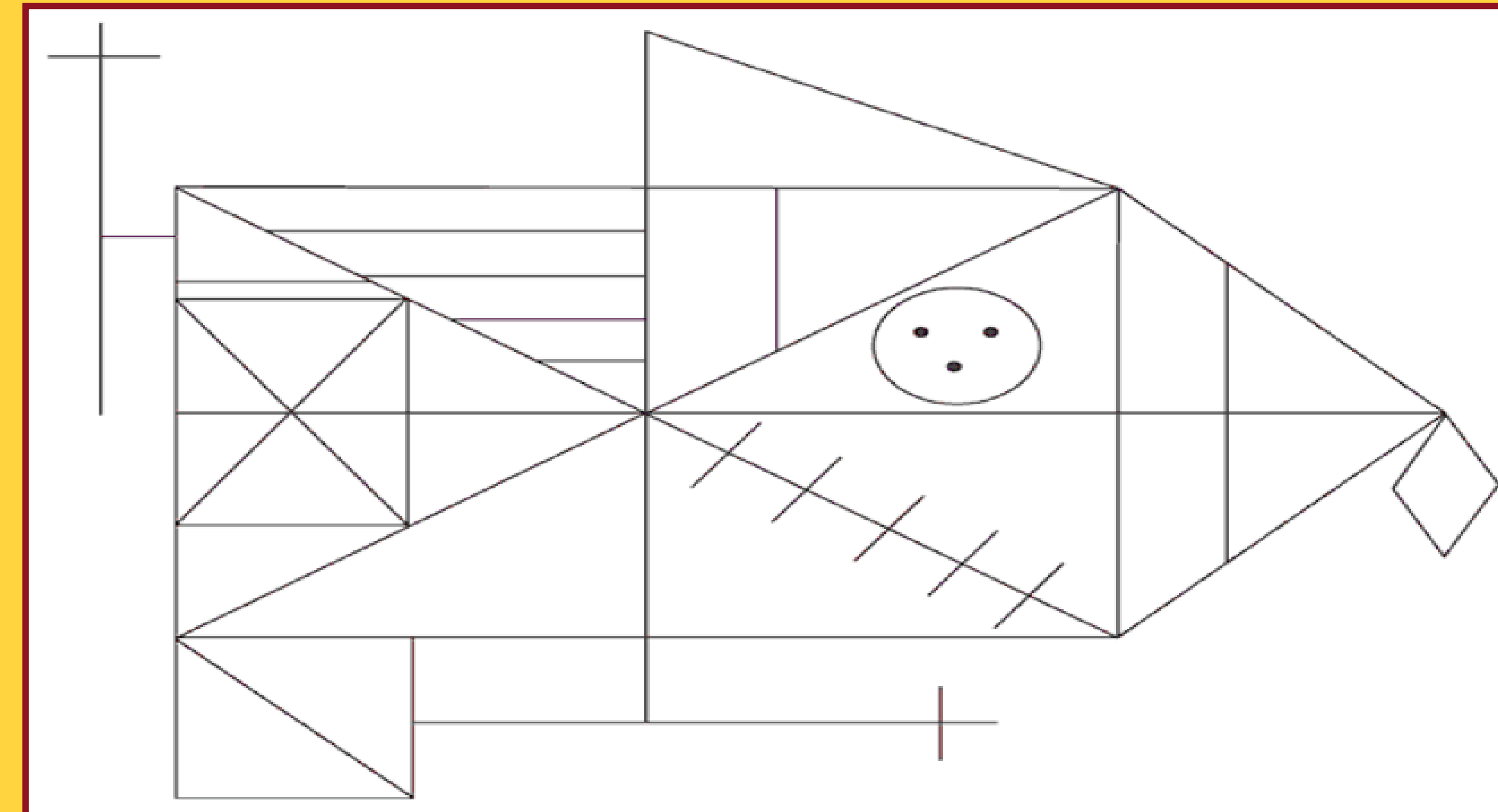
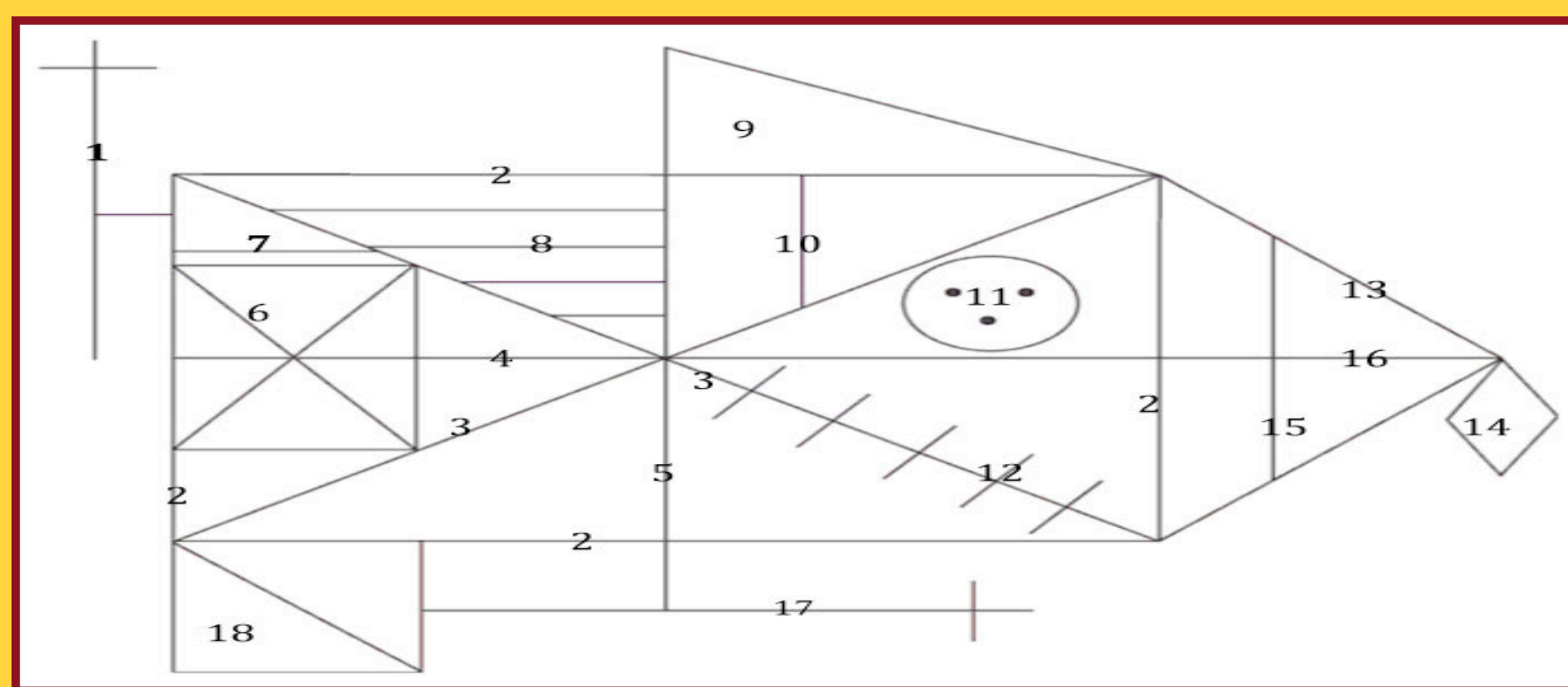


Figure 1: The Rey-Osterrieth Complex Figure

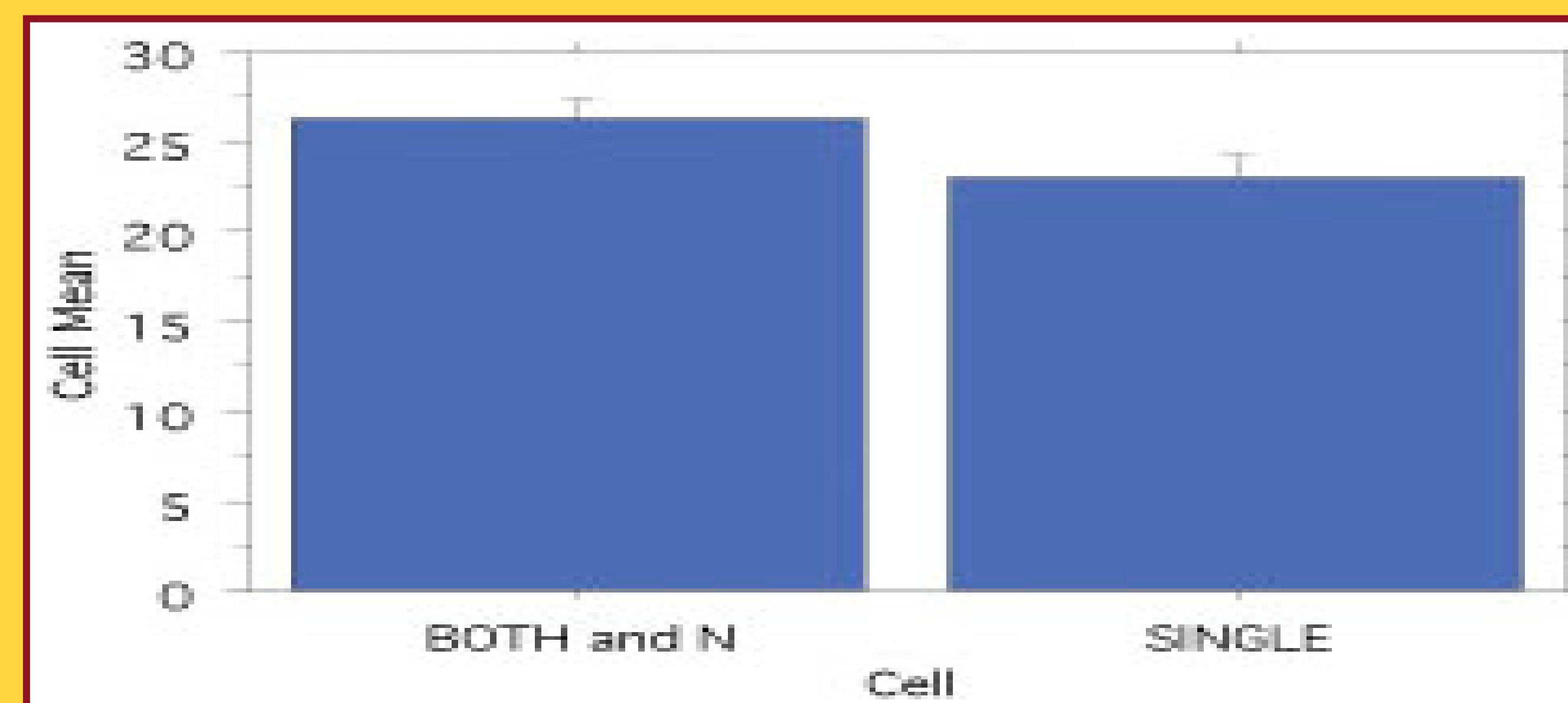


Figure 2: Delayed Recall and LoC+LoS vs. Neutral

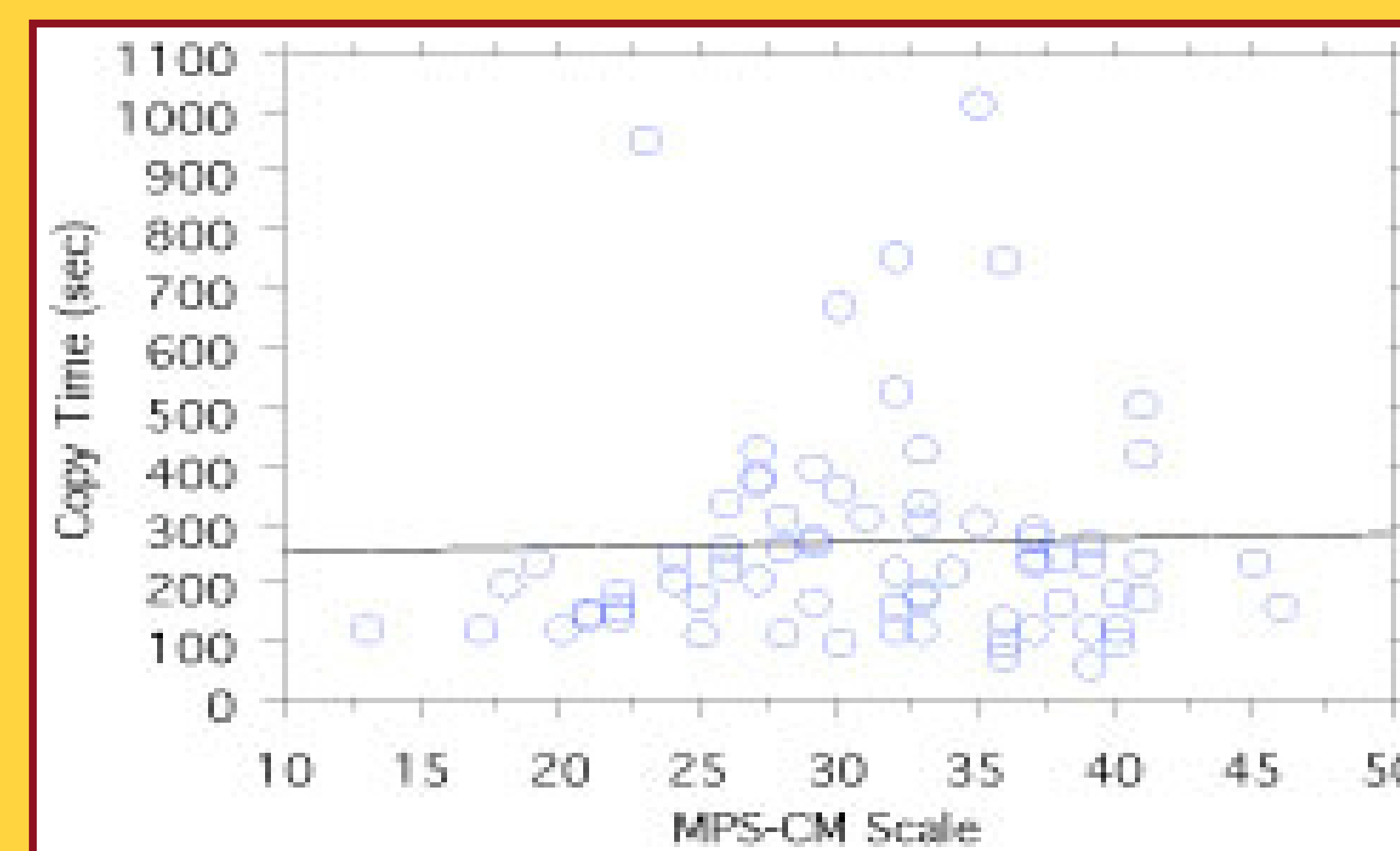


Figure 3: Correlation of perfectionism and copy time

Results

- When analyzing the ROCF drawings in relation to the personality questionnaires we found that there were no significant effects of personality on ROCF performance in relation to copy time (Figure 3) or recall accuracy.
- Those in the combined LoC and LoS instructions improved delayed recall of the ROCF compared with either instruction alone, but not above neutral performance (Figure 2).

Discussion

Although participants did not perform as hypothesized we were able to observe the methods that participants used to perform various problem-solving tasks. The fact that participants did perform better in the combined LoC and LoS but not above the neutral suggests that participants varied both their LoC and LoS on this task.

References

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Acknowledgments

Undergraduate Research Experience for Undergraduates Program (UROP).



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