



Individual Differences in Verbal Cognitive Styles

Jennifer H. DeSantis, David J. M. Kraemer, & Sharon L. Thompson-Schill

Department of Psychology, Center for Cognitive Neuroscience, University of Pennsylvania, Philadelphia

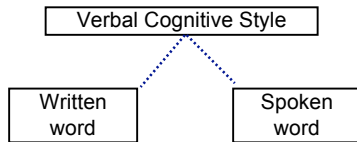
Lab website: <http://www.sas.upenn.edu/psych/stslab/>

Introduction

- Cognitive styles are self-reported preferences for processing information in visual and verbal modalities.
- These preferences have been linked to modality-specific neural activity and task performance (Kraemer et al., 2009).
- The visual cognitive style dimension has previously been shown to involve two distinct properties: object and spatial processing (Kozhevnikov et al., 2005).

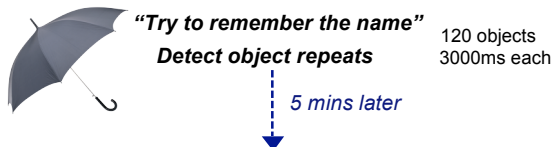
Question

- Is the verbal cognitive style separable into two component parts of written and spoken words?



Methods

1. Study Phase



2. Test Phase: Lexical Decision Trials

Primed	Unprimed	Nonwords
umbrella	chair	wiblid

Written Trials



Auditory Trials



3. VARK Survey (16 items) (Adapted from Fleming, N.D)

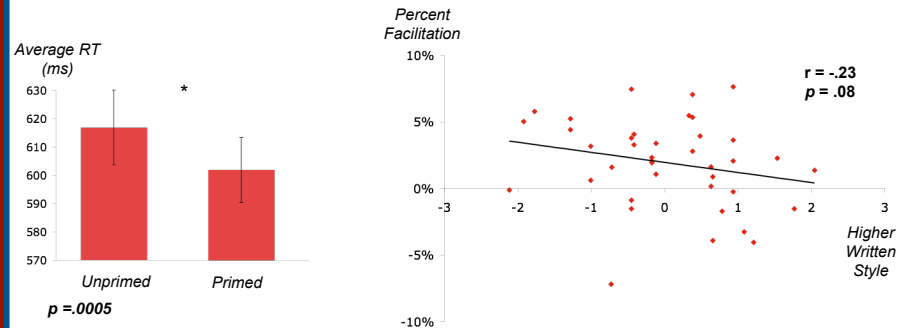
- Remember a time when you learned how to do something new. You learned best by:
 - A: Written instructions e.g., a manual.
 - B: Listening to somebody explaining it.

Participants

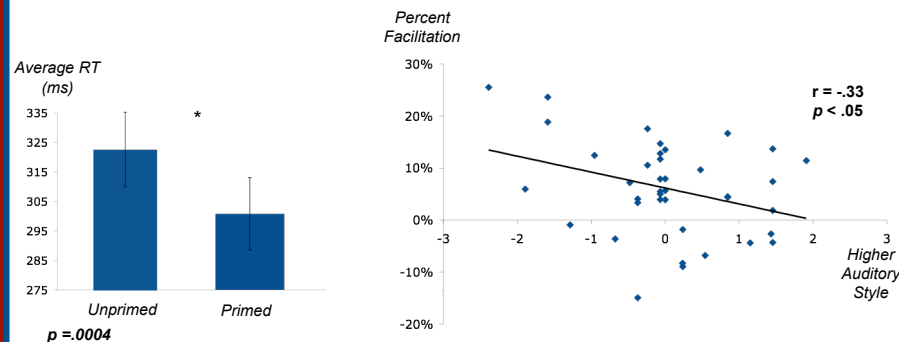
Ages 18-35, N = 39
Two subjects were removed from analysis

Results

Written Lexical Trials



Auditory Lexical Trials



Summary and Conclusions

- Verbal cognitive style scores negatively predict facilitation in written and auditory lexical decision trials.
- Individual preferences for representing verbal information about an object may be more narrowly differentiated by the auditory and written properties of those words.
- Future investigations are needed to assess the ways that task specifics influence the effects of different cognitive styles.

References and Acknowledgments

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- Kozhevnikov, M., Kosslyn, S., & Shephard, J. (2005). *Memory & Cognition*, 33(4), 710-726.
- Fleming, N.D. (1992). <http://www.vark-learn.com>
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- Please contact J.H.D. (jdesan@sas.upenn.edu) with any questions or reprint requests.