Remembering Abstract vs. Concrete Words

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This project investigated the effect of concreteness and level of processing on a person's ability to later recognize a word. Research has shown that concrete words have more "meaning-based features" than abstract words, which makes recall easier and more accurate (Walker & Hulme, 1999, p. 1267). Level of processing also has a significant effect on recall, such that deep processing is associated with better performance than superficial processing (Weldon & Bellinger, 1997).

METHODS
Participants
• 14 subjects (7 F); average age 19;9
• Right-handed, no history of learning, language, or neurological disorders

Previous Task
• 120 concrete, 120 abstract words
• Surface (superficial: "e" in word?)
• Visualization (deep: easy to make mental image of word?)

Memory Task (reported here)
• 60 old words
• 60 new words
• Button press judgment: old/new

RESULTS
Accuracy

	Mean	(SD)
Surface	53.72%	(19.19%)
Visualization	88.16%	(9.32%)
Abstract	66.96%	(18.06%)
Concrete	80.01%	(8.59%)

• Subjects remembered more words seen in visualization than surface condition
  (t(13) = -7.75, p < .001)
• Subjects remembered more concrete words than abstract words
  (t(13) = 2.69, p < .05)

Reaction Times

	Mean	(SD)
Surface	1153.8	(252.21)
Visualization	1043.78	(236.75)
Abstract	1127.36	(246.28)
Concrete	1010.84	(244.72)

• Subjects responded more quickly to words seen in visualization than surface condition
  (t(13) = 2.71, p < .001)
• Trend for subjects to respond more quickly to concrete than abstract words
  (t(13) = -1.94, p = .074)

CONCLUSIONS

• Words are easier to remember when initially processed at a deeper level than at a shallow, superficial one
• Concrete words are more accurately remembered than abstract words

REFERENCES

Walker, I., & Hulme, C. (1999). Concrete words are easier to recall than abstract words: evidence for a semantic contribution to short-term serial recall. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *25*, 1256-1271.

Weldon, M.S., & Bellinger, K.D. (1997). Collective memory: Collaborative and individual processes in remembering. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 23*, 1160-1175.

ACKNOWLEDGEMENTS