

I. Prabhakaran/Jon

II. Visuo-spatial WM

III. Cognitive Control

IV. Neuroimaging of Cognitive Control

What is the nature of rehearsal in visuo-spatial WM?

Visuo-Spatial Selective Attention

Rehearsal in Visuo-Spatial Working Memory

Rehearsal in Visuo-spatial Working Memory

Updated Understanding of Forms of WM

Set Shifting: Rule Switch Task

Plus-Minus Task

- Group 1: + or -3
- Group 2: Alternate +/-3

15

97

54

18

85

69

47

72

28

86

13

65

Updating Tasks

Keep Track Task

red, uncle, mile, dog, brazil, foot, iron, zebra, ...

“animals, colors, countries, distances, metals, relatives”

Presented 15 words, 2-3 from each category

- Task: remember last word presented in each category

Multiple Control Processes?
(Miyake et al., 2000)

Classification of Tasks
Maintenance vs. Manipulation?
(Wagner et al., 2001)
Task Analysis
Prefrontal Activations
VLPFC / DLPFC Dissociation