

Karen Renaud & Judith Ramsay

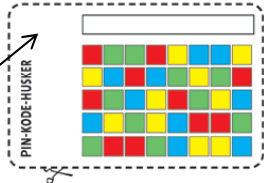


## Too Many PINs, Not Enough Memory!

### How can we help people?



Too clumsy  
Insecure  
Cues?



## What about cueing with colour?

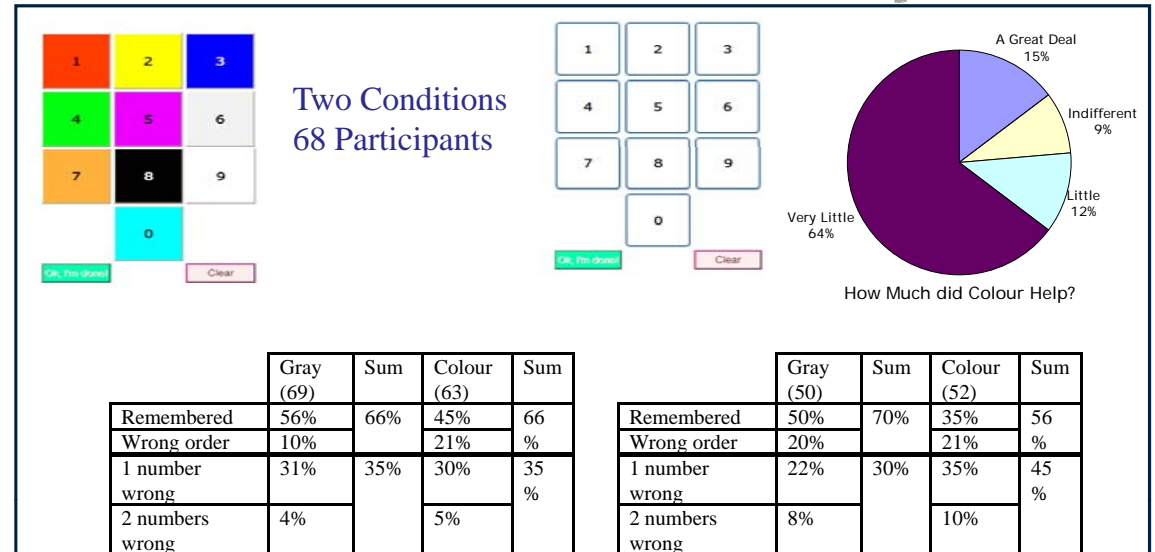
Colour is processed perceptually & cognitively  
Colour of objects encoded and speeds up recognition  
Will background colour be remembered?

## Experiment

Enrol – issue PIN  
Test 1 week later  
Test 3 weeks later

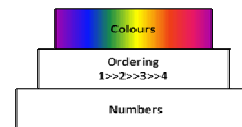


Demographics  
Web Experiment  
Questionnaire After



## Why Did Colour Impair PIN Retention?

Colour is related to language.  
Memory requirements were:



Colour is linked to objects in memory. Background colour was not remembered

Pre-existing colour-numeral associations

8 vs 8

Numerals are logograms with complex meanings

2 = 