Perceptually Fluent Features of Study Words Do Not Inflate Judgments of Learning: Evidence from Font Size, Highlights, and Sans Forgetica Font Type.

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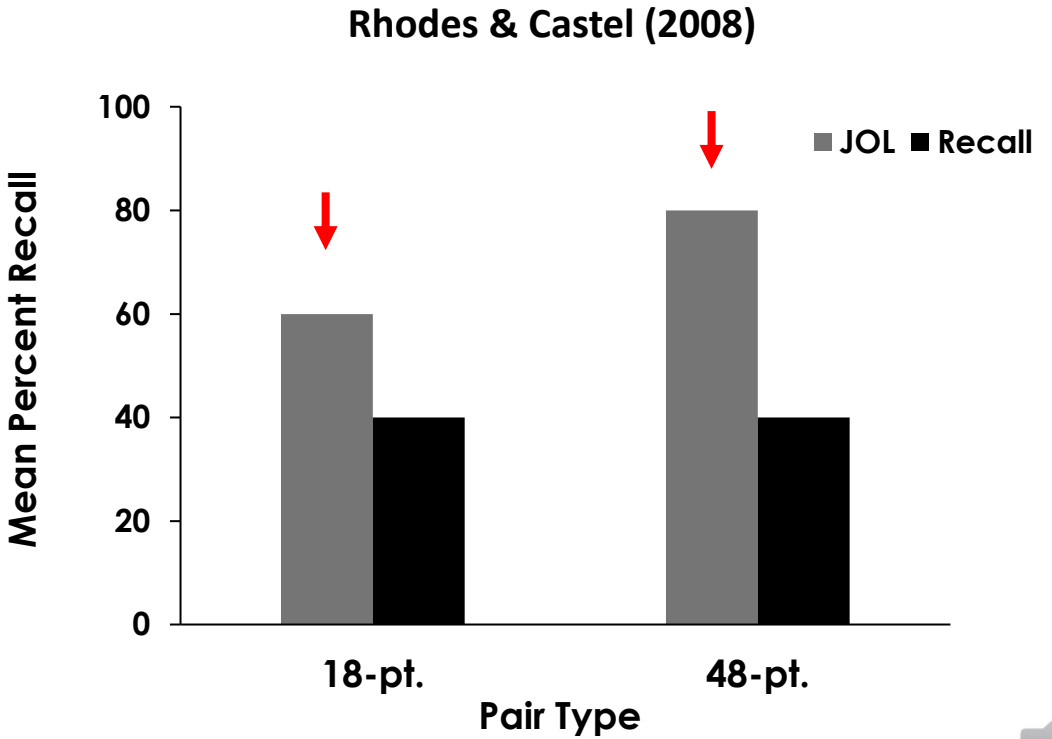
Abstract 2416

Introduction

- Judgments of learning (JOLs) are commonly used to assess metacognitive processes.
- Font-Size Effect
  - JOLs are increased for large vs small font
  - Metacognitive Illusion - No differences to recall
- Goal: Replicate Rhodes & Castel (2008) while extending to other perceptual manipulations
  - Highlighting
  - Sans Forgetica



Overview of Experiments

- **Experiment 1** – Font-Size (*n* = 41) vs. Highlighting (*n* = 41) vs. Control (*n* = 39)
  - 54-pt. vs. 12-pt./32-pt. Yellow Highlight vs. 32-pt Arial/32-pt. Arial
  - related vs unrelated pairs
- **Experiment 2** – Font-Size (*n* = 36) vs Highlighting (*n* = 40) vs Control (*n* = 32)
  - unrelated pairs only
- **Experiment 3** – Sans Forgetica (*n* = 39) vs Control (*n* = 41)
  - Unrelated pairs only
  - 32-pt. Sans Forgetica vs. 32-pt. Arial/32-pt. Arial

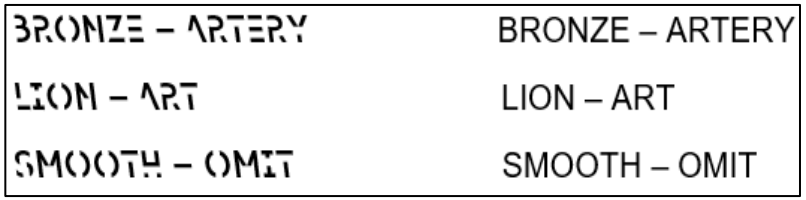
credit-card

credit-card

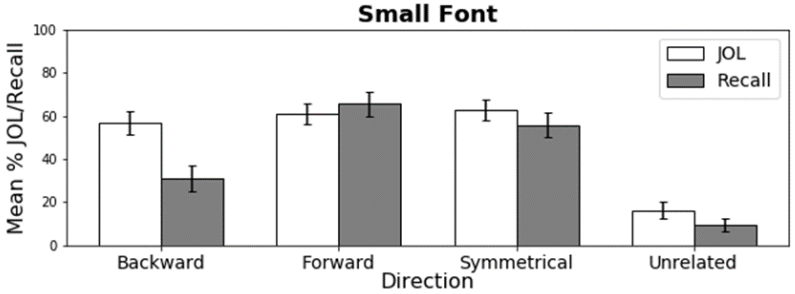
credit-card

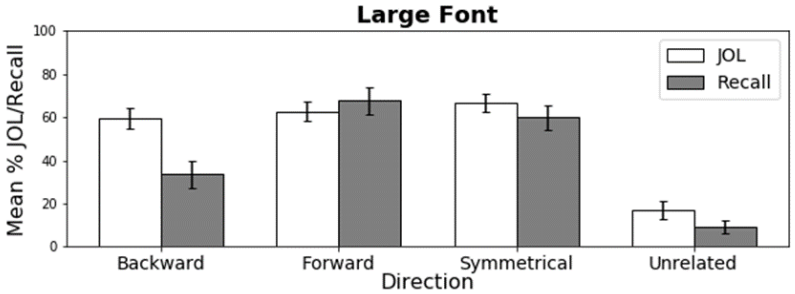
credit-card

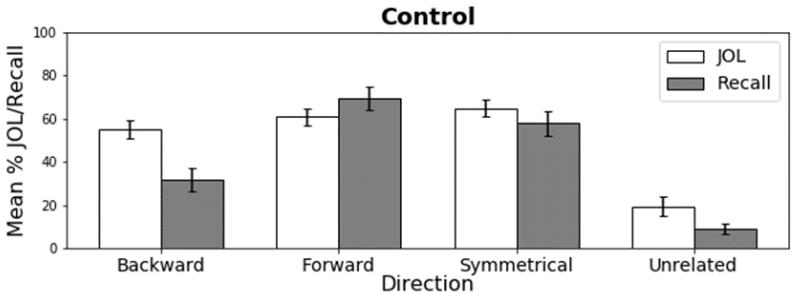
credit-card



Results – Experiment 1 (Font-Size)







Large vs. Small

Large font produced greater JOLs/recall relative to small, $F(1, 40) = 12.20$, $MSE = 66.26$, $\eta_p^2 = .23$

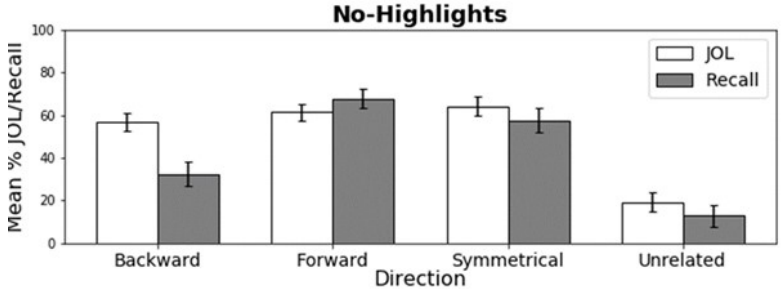
No Interaction!

Large and Small vs. Control

No effect of font-size and no interactions, Fs < 1.47, ps > .22, p_{BIC}s > .99

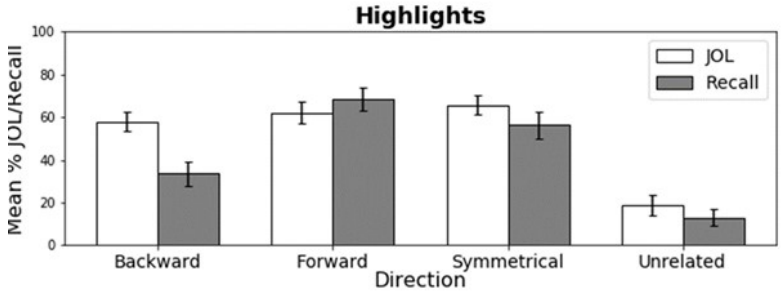
*Bars indicate 95% CI

Results – Experiment 1 (Highlighting)



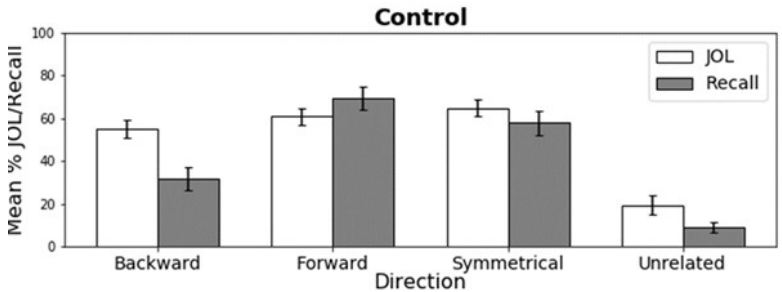
Highlight vs. No-Highlight

No effect of highlighting, $F < 1$, $p_{BIC} = .83$



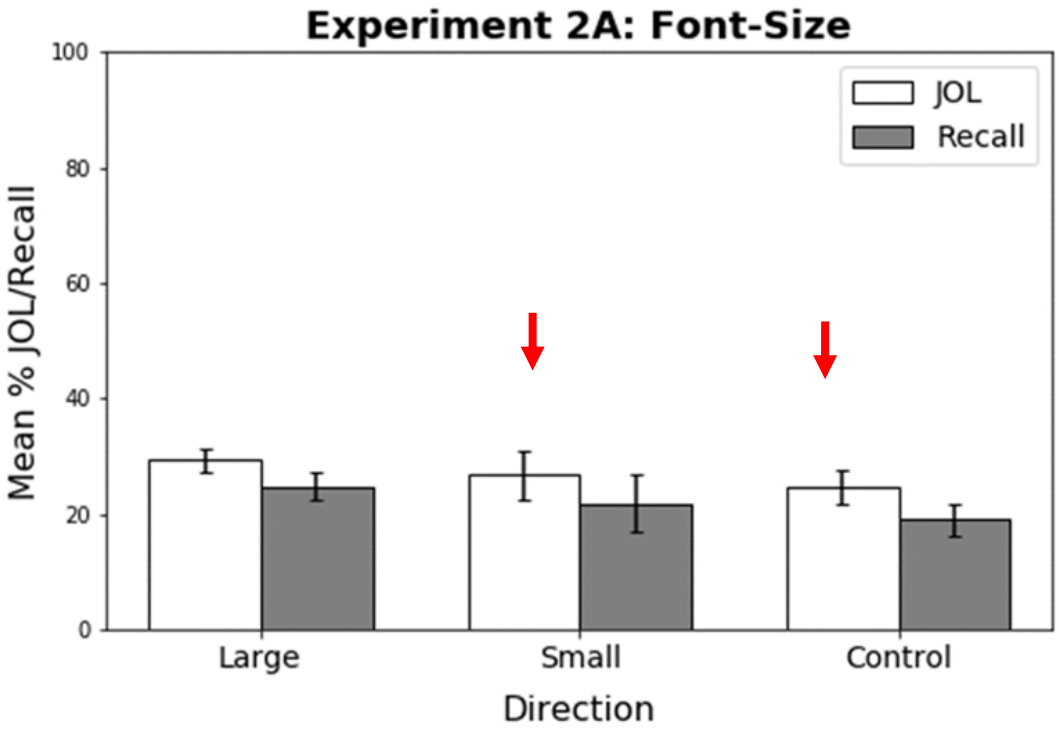
Highlight and No-Highlight vs. Control

No effect of Highlighting and no interactions, Fs < 1.56, ps > .19, $p_{BICs} > .99$.



*Bars indicate 95% CI

Results – Experiment 2 (Font-Size)



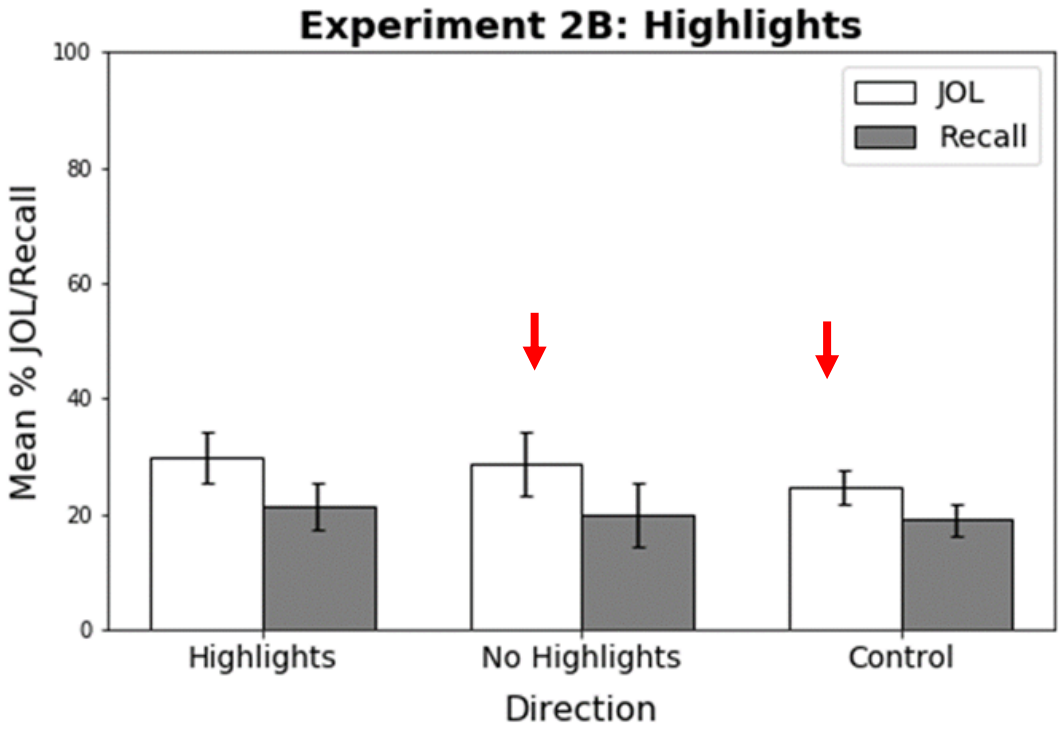
Large vs. Small:
Large font produced greater JOLs/recall relative to small, $F(1, 35) = 19.10$, $MSE = 13.76$, $\eta_p^2 = .35$

Large vs. Control:
Marginal effect of font-size, $F(1, 66) = 3.54$, $MSE = 249.20$, $p = .06$, $\eta_p^2 = .05$, $p_{BIC} = .58$

Small vs. Control:
No effect of font-size, $F < 1$, $p_{BIC} = .85$

*Bars indicate 95% CI

Results – Experiment 2 (Highlighting)

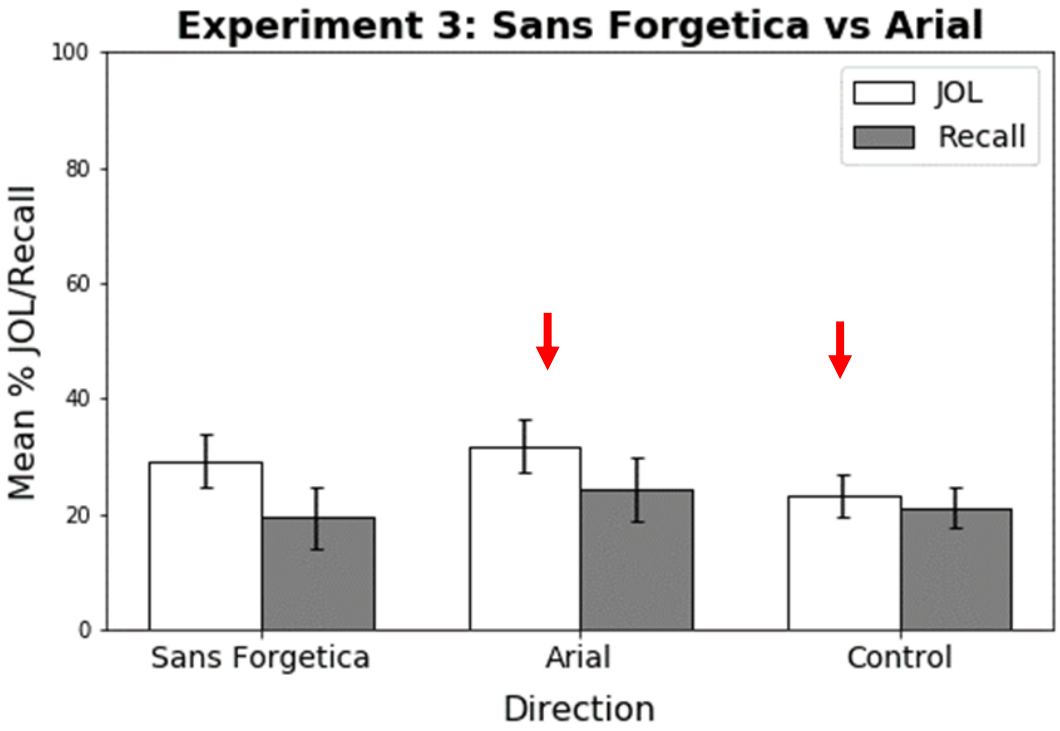


Highlight vs. No-Highlight
No effect of highlighting, $F(1, 36) = 2.82$, $MSE = 18.23$, $p = .10$, $p_{BIC} = .60$

Highlight and No-Highlight vs. Control:
Fs < 1, p_{BIC}s > .85.

*Bars indicate 95% CI

Results – Experiment 3



*Bars indicate 95% CI

SF vs. Arial:
SF produced lower JOLs/recall relative to arial, $F(1, 38) = 17.77$, $MSE = 28.66$, $\eta_p^2 = .32$

SF vs. Control:
No effect, $F < 1$, $p_{BIC} = .86$

Arial vs. Control:
JOLs/recall rates were greater for Arial font pairs than the control pairs $F(1, 78) = 5.01$, $MSE = 271.12$, $\eta_p^2 = .06$

Conclusion

- Partially support Rhodes & Castel (2008)
  - Large font produces some benefit for both JOLs and recall (Ex 1 and 2)
  - Failed to extend to highlights (Ex 1 and 2) and Sans Forgetica (Ex 3)
  - Higher JOLs for Arial pairs in mixed lists suggests participants favor fluent fonts
- Perceptually distinctive pairs do not seem to selectively benefit JOLs!