Improving Contact Tracing with Directed Recall

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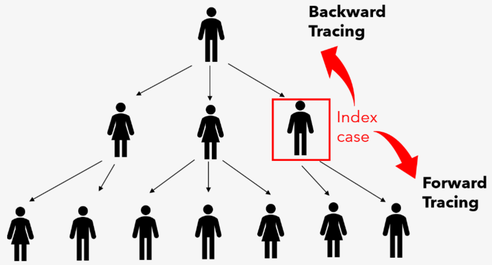
Introduction

Contact tracing is a key strategy for slowing the spread of infectious diseases.

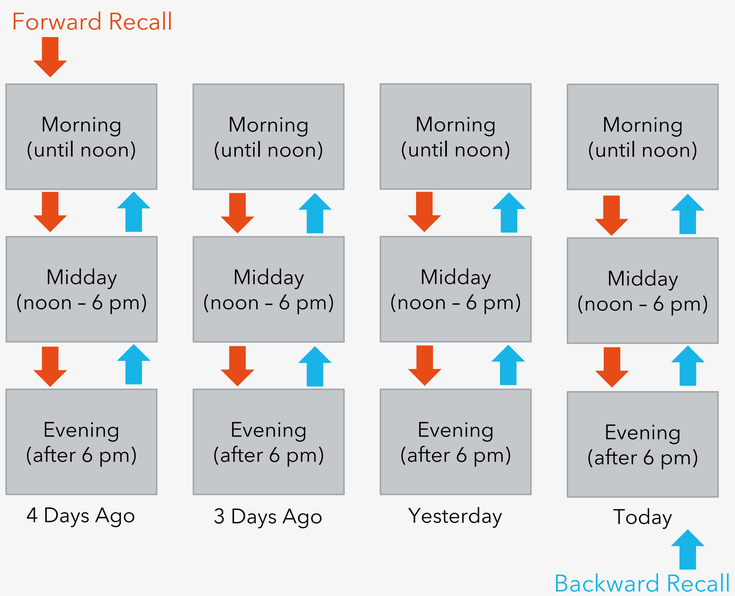


Backward tracing is useful for identifying the parent case.

Forward tracing is useful for preventing continued spread.

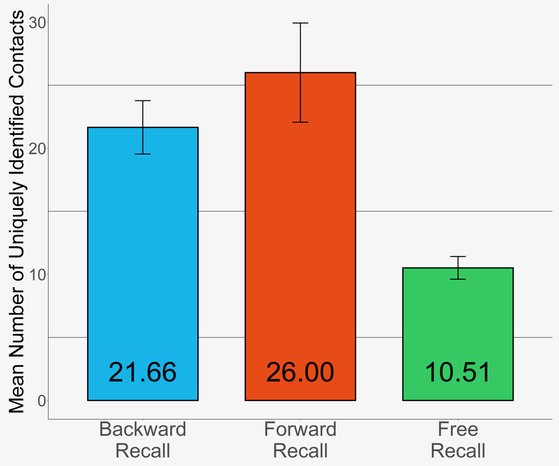
Two experiments examined the effect of a **directed recall** manipulation on the quantity of names produced during contact tracing interviews.

General Methods

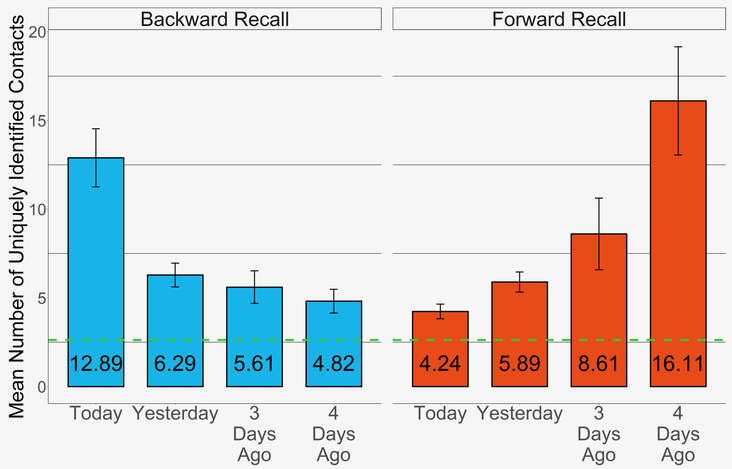


Experiment 1, N= 116 (Between-Subjects)

Free recall vs. forward recall vs. backward recall



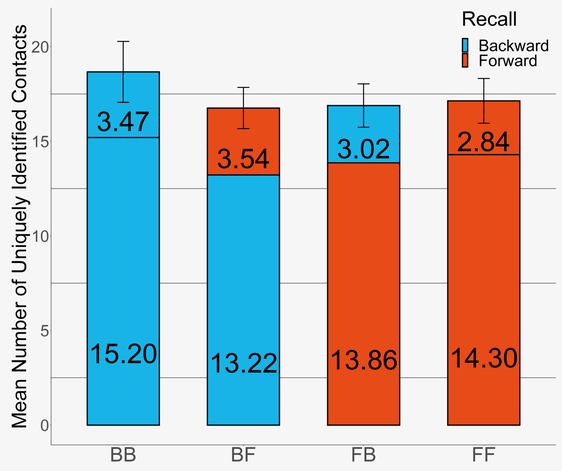
More contacts were reported in directed recall than in free recall.



Backward recall elicited more contacts for recent days, whereas forward recall elicited more contacts for more distant days.

Experiment 2, N = 174 (Between-Subjects)

Two directed recalls, either forward or backward



A second recall attempt led to retrieval of ~3 additional contacts.

Replication of directed recall bias effect from Experiment 1.

Conclusions

- Directed recall results in more contacts being reported than free recall.
- A second recall attempt leads to additional contacts, regardless of recall direction.
- Backward recall elicits relatively more recall of the recent contacts, making it appropriate for forward tracing protocols.
- Forward recall elicits more retrieval of distant contacts, making it appropriate for backward tracing protocols.