

Question

How are two heads better than one?

- Pairs search twice as fast as individuals (S. Brennan et al., 2008)
- Pairs outperform individuals on threshold perceptual decision-making (Bahrami et al., 2010)
- Shared linguistic expressions correlated with collective benefit (Fusaroli et al., in press)

... but is pair more than sum of parts?

- Do collaborative searchers **pool** information or are there simply **horse race** benefits?

Horse race



Response

Coactivation



Response

Miller's (1982) coactivation test

- A coactivating system can combine two signals faster than one making independent decisions on each signal

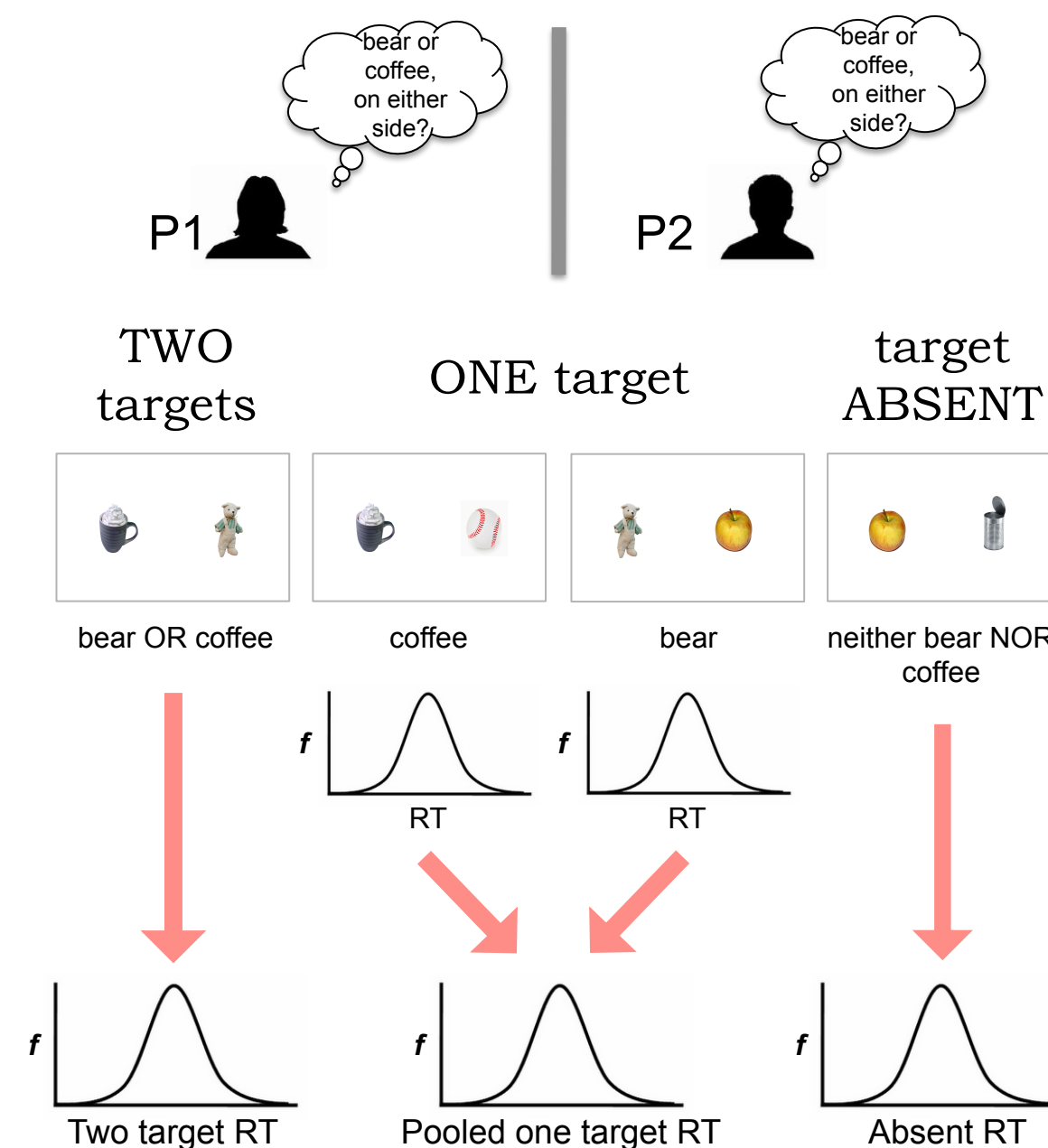
Collaborative coactivation in search

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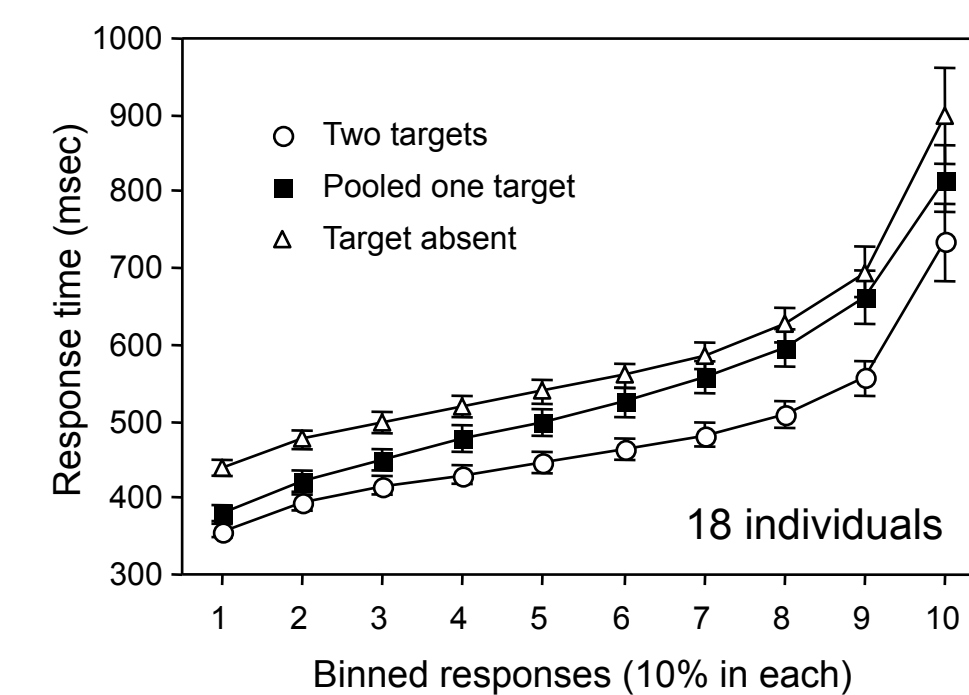
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Methods

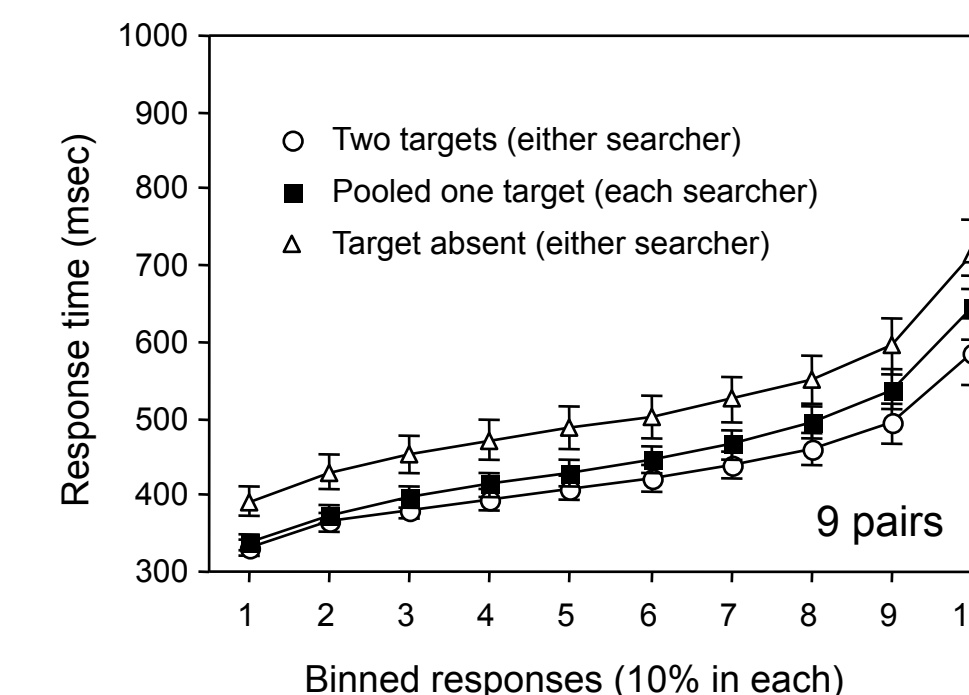
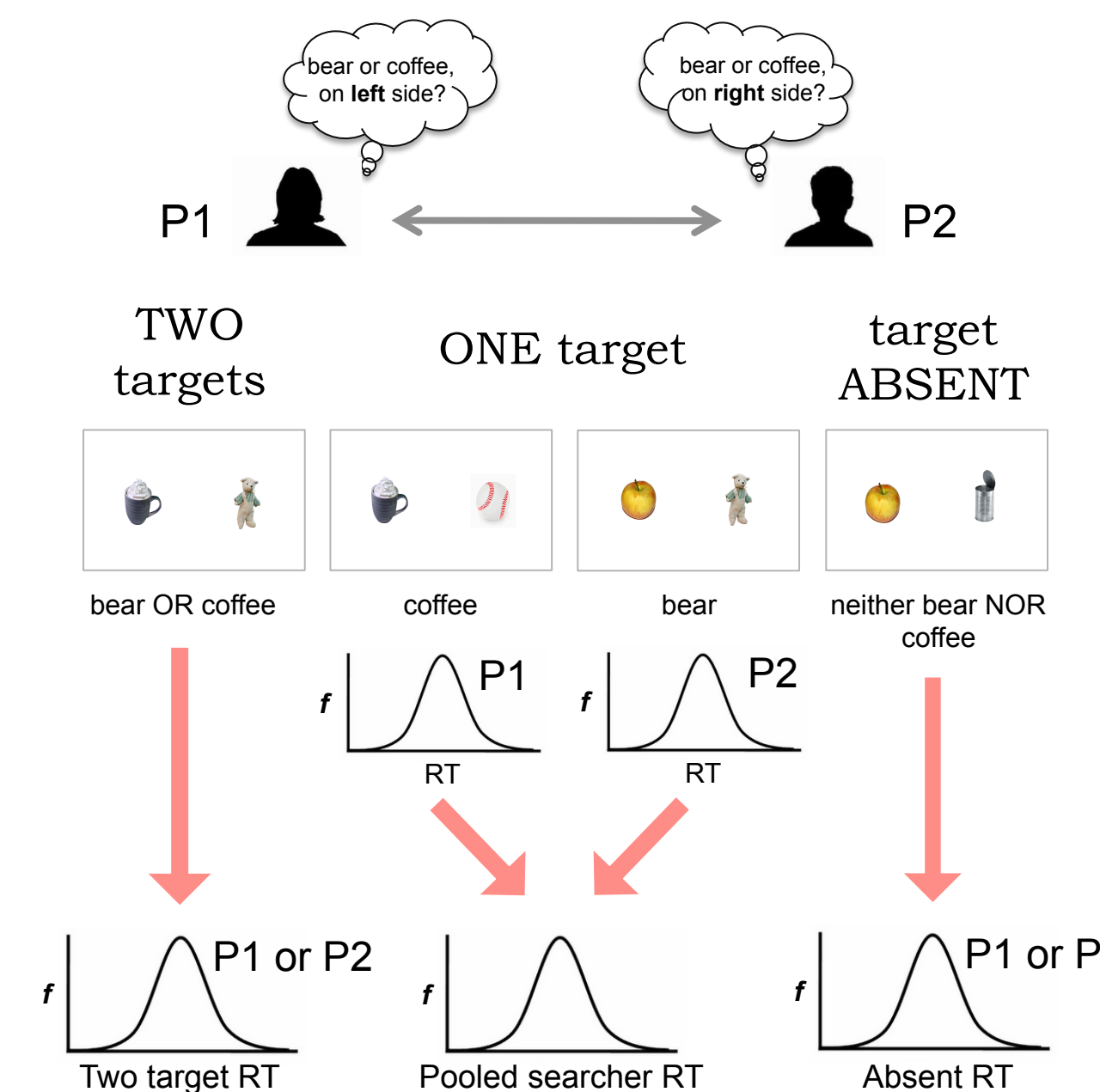
Individual search



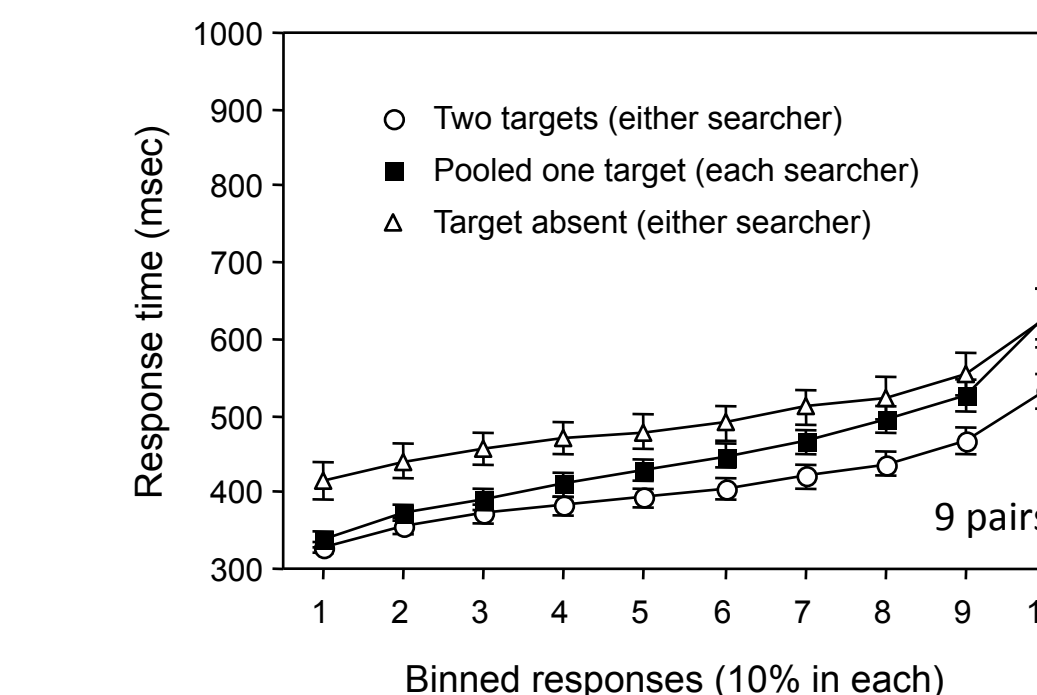
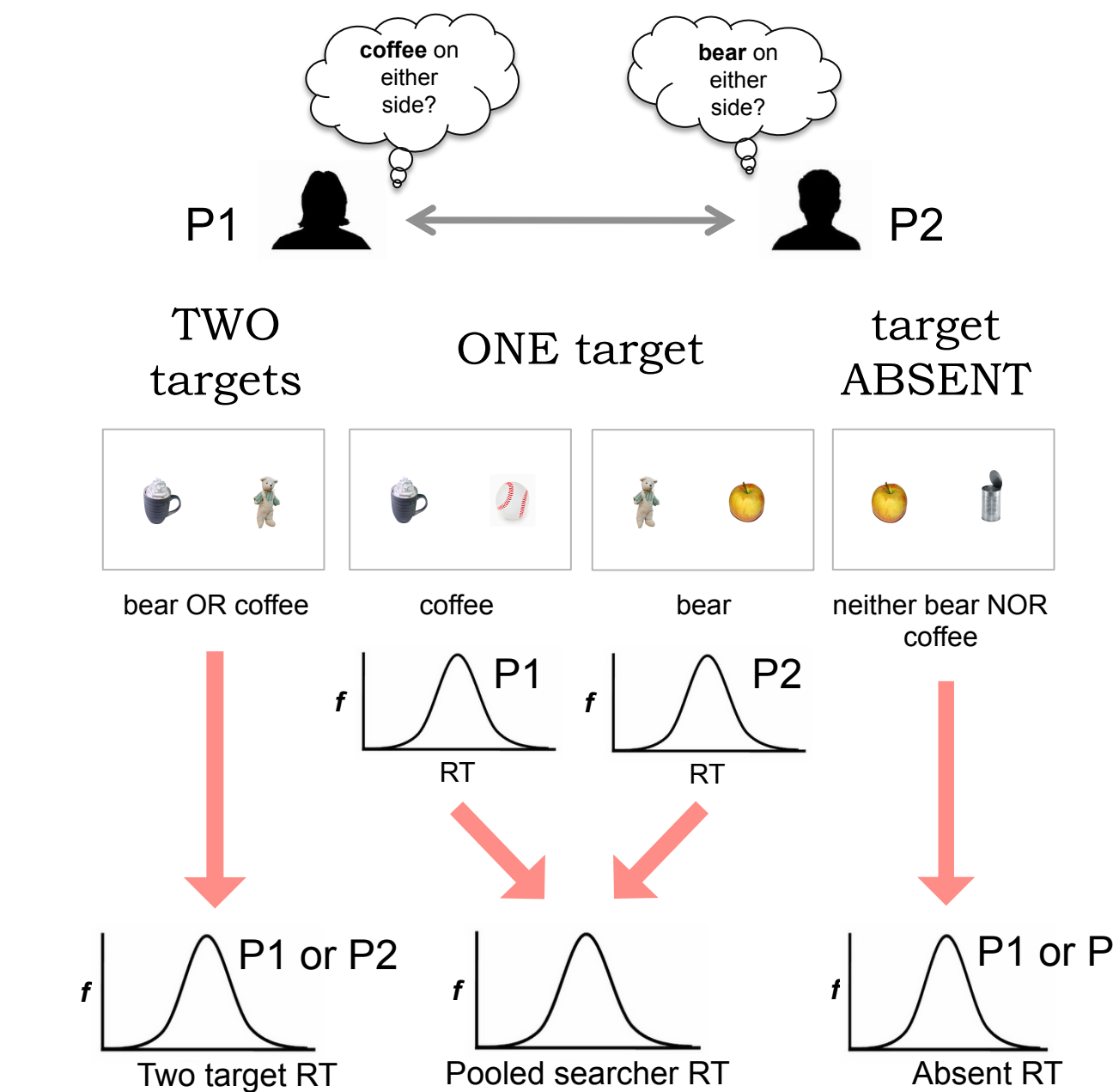
Results



Social search - space specialists

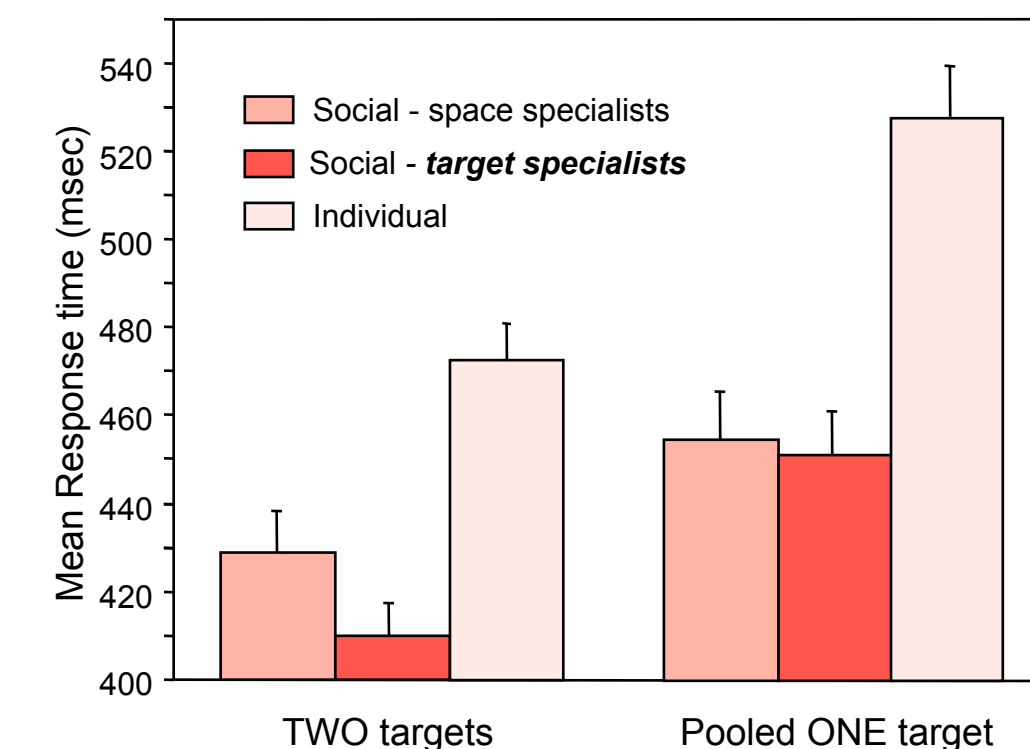


Social search - target specialists

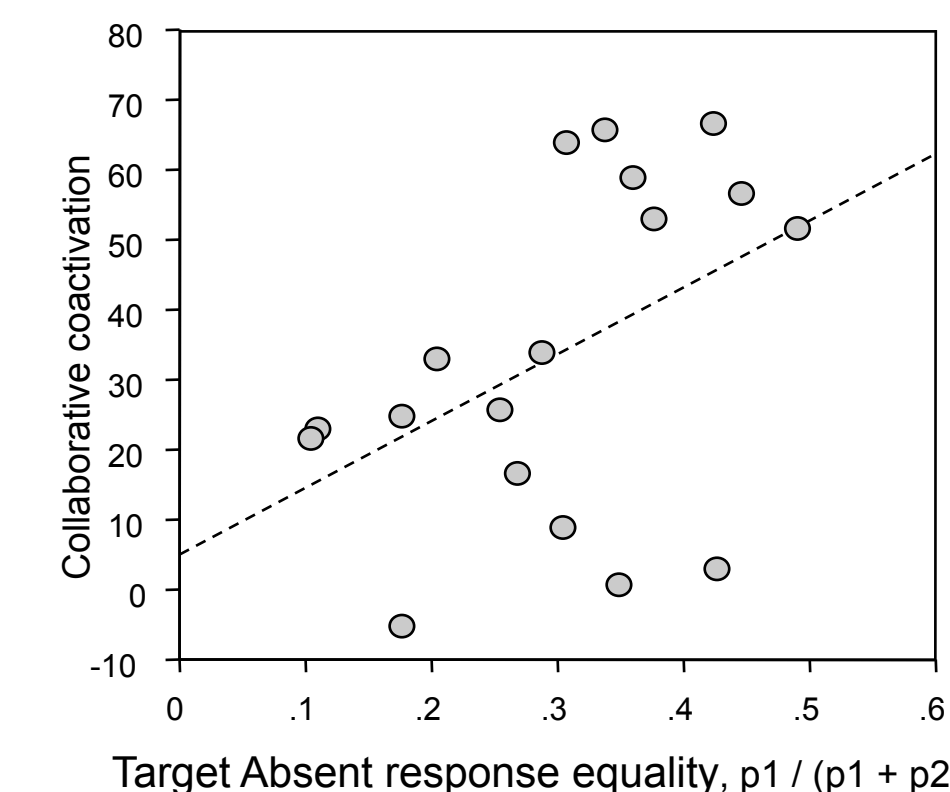


Summary

Greatest social benefit for **target specialists**



Pairs who **shared task most equally** had greatest social benefit



Conclusion

Social search is more than a **horse race!**

- Collaborative benefit is more than searchers working independently
- Collaborative searchers **pool** information, resulting in **collaborative coactivation**

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a place of mind
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