Consider The Keyboard:
Information from keystroke patterns can increase the effectiveness of digital mental healthcare

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What can keystroke patterns reveal?

- Emotional states[1]
- Deception[2]
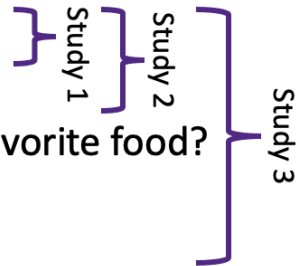- Cognitive load[3]
- Ease of language production[3]

My studies:

A: How are you?
B: I'm good.
A: What is your favorite food?
B: Tacos
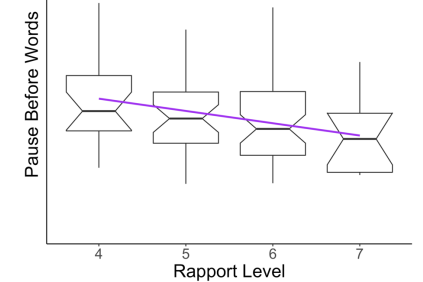A: Cool. Bye!

Study 1
Study 2
Study 3

Research Questions:

1. How does the rapport between partners affect typing?
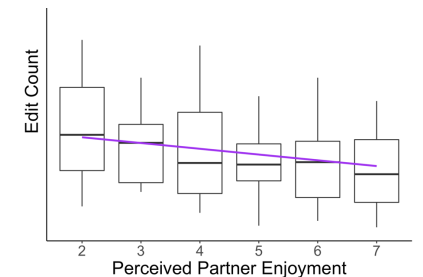2. How does a speaker's self-awareness affect their typing?

When typing text, the typing patterns of keystrokes (pauses and edits) can reveal underlying emotions, intentions, and social dynamics.

Early Results:

- Pauses get shorter as rapport increases

- As perceived enjoyment increases, self-edits decrease

Sources:
[1] Epp., Lippold, & Mandryk. "Identifying emotional states using keystroke dynamics." *CHI* 2011.
[2] Banerjee, , et al. "Keystroke patterns as prosody in digital writings: A case study with deceptive reviews and essays." *EMNLP* 2014.
[3] Goodkind *et al.*, "Utilizing overt and latent linguistic structure to improve keystroke-based authentication." Image & Vision Computing 2017.