

Feedback Preferences for Mobile Text Entry

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Methods Used:

- User testing
- Surveys
- Metrics/log analysis

Research Composition (est.):

90%	10%
Primary	Secondary
50%	50%
Generative	Evaluative

Motivation

- 1.4 billion smartphones, 268 million tablets*
- Most use touchscreen (soft) keyboards for typing (texting, social networking, emailing, document editing)
- Advantages
 - Appear only when needed
 - Adjust to input method and language
- Disadvantages: no tactile feedback
 - Audio feedback (e.g., a “tick” sound from the speaker)
 - Haptic feedback (i.e., the device shakes a little)

* Figures from ABI Research, 2013

Research Questions

1. What feedback (or combination of feedback) do users **prefer** and why?
2. Does the type of feedback affect users' **performance**?
3. Does the type of feedback affect users' **perception** of performance?

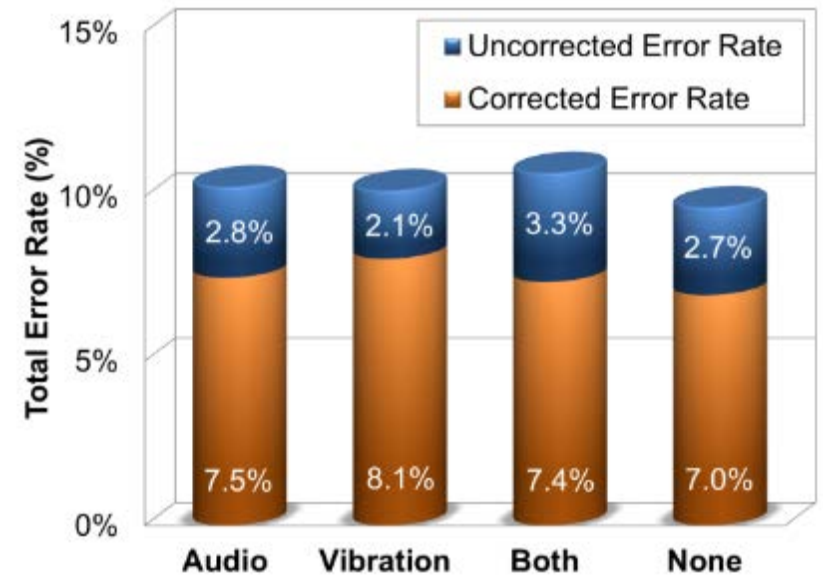
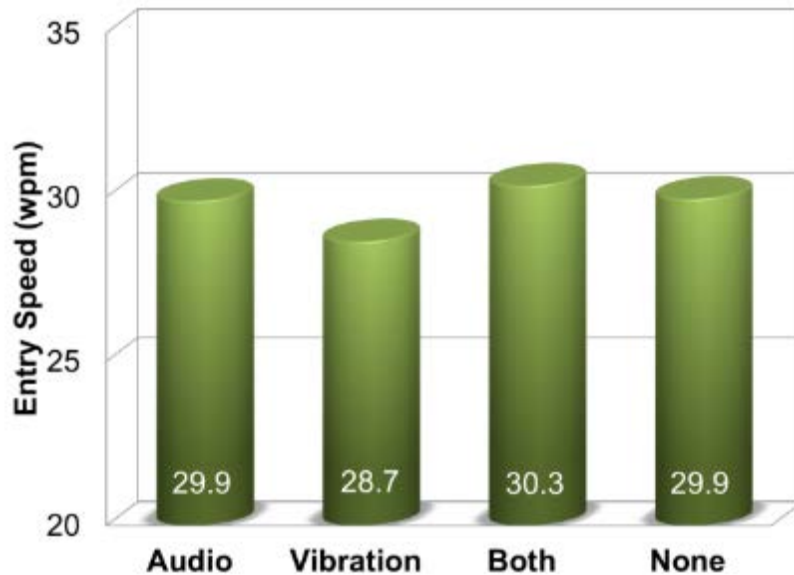
User Behaviour – User Study



- 12 participants (2 females, 10 males)
- Two-thumb, QWERTY, no word correction or prediction
- 30 phrases (5 warm-up) in each condition
- Audio and haptic feedback provided by the mobile phone
- My TEMA app used to administer phrases and gather measurements

Study Results

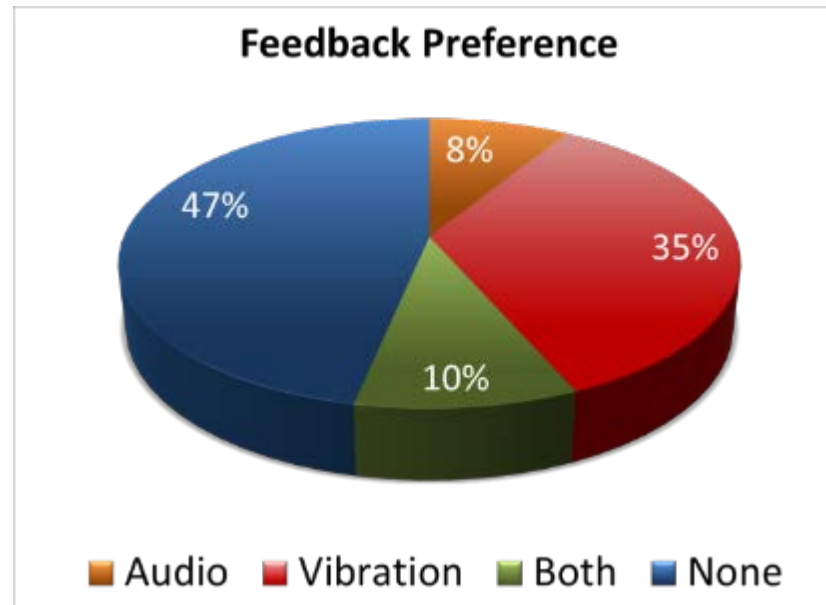
- Disconnect between users' actual and perceived performance
- Performance difference between the four conditions was **not** statistically significant



User Attitude – Survey

- Posted on mobile technology forums:

Smartphones allow feedback when typing. What feedback do you prefer when typing (e.g., texting, emailing, etc.)?



Survey Comments (1/3)

- Ethic of reciprocity

“Audio feedback annoys me a little when using it, and it annoys me A LOT when the person next to me is using it!”

“i [sic] prefer silence, no audio, no vibration, because audio will influence other people, while vibration will make me uncomfortable.”

Survey Comments (2/3)

- Sound clips used are unnatural

“I can't stand that fakey clicking sound.”

“The audio feedback is often annoying; this isn't the nineteenth century anymore, and often the noises devices choose are silly.”

Survey Comments (3/3)

- Haptic feedback indicates input was received

“I activate the haptic feedback, because it give [sic] me a sense that the phone is really typing.”

- Conserve battery power

“I prefer no audible or haptic feedback what so ever. To me, they are pointless and help eat battery life that I can be better used [sic] for programs I use.”

Insights

- Zero feedback preferred, vibration a close second
- No significant effect of feedback on typing performance
- Disparity between users' actual and perceived performance
- Feedback preferences influenced by
 - Social factors
 - Choice of sound effect
 - Device responsiveness
 - Power consumption