

Touching Intentions: Pressure and Duration as Behavioral Markers of Smartphone Typing Across Generations and Contexts

Friday, September 12, 2025 4:00 PM (15 minutes)

Mobile typing is a widespread activity. Despite its ubiquity, mobile typing has predominantly been examined in controlled, low-ecological settings. The focus has often been limited to conventional metrics such as speed and error rate. The present study adopts a novel methodological approach to investigate behavioral aspects of mobile typing that have received limited attention —specifically, touch pressure and the duration of screen contact. Data were collected in environments designed to more closely approximate naturalistic smartphone use. For this purpose, a custom-developed Android application (SMoDS) was employed, specifically designed to explore sensorimotor parameters during touchscreen interaction.

Participants were assigned to two generational cohorts —Digital Natives and Digital Immigrants (Prensky, 2001) —and engaged in two common smartphone activities: social content generation (chatting) and individual content consumption (web search). This experimental design enabled comparative analyses across both generational groups and task contexts.

Results indicated that both the touch pressure and duration were modulated by task type and generational group. Although the effects were not consistently observed across all conditions, the emerging patterns suggest that motor strategies may be shaped by task demands and by users' generational affiliation.

By introducing touch pressure and duration as complementary behavioral markers of mobile typing, this study contributes to the refinement of methodological tools in touchscreen interaction research and provides insights into the ways motor behavior adapts across digital environments and user profiles.

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Unpacking Digital Dexterity: Cognitive and Sensorimotor Perspectives on Mobile Typing

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No

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