A Survey of Notification Designs in Commercial mHealth Apps

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Motivation

- Mobile health (mHealth) app notifications help users achieve their health goals [1,2].
- However, few mHealth apps are grounded in advised health behavior theories or properly evaluated [3].
- We wanted to examine if there was a gap between existing notification design recommendations and practice for mHealth app notifications.

Method

- Two researchers downloaded and interacted with 50 mHealth apps for 5 days.
- Accumulated a total of 1,390 notifications.
- Transcribed and qualitatively coded each notification based on 13 different dimensions.

Findings

- Found a disconnect between current practice in mHealth app notifications and recommendations in several areas: Occurrence, Frequency, Content Purpose, Interactivity, Tailoring, and Sender.

Open Research Questions for mHealth Apps

- Occurrence: What contextual triggers would be effective in increasing engagement and adherence in mHealth apps?
- Frequency: How often should notifications be sent to keep users engaged in mHealth? Does it differ based on app theme?
- Interactivity: What interactive elements help the most with mHealth app engagement?
- Notification Type: Does push or inside app notifications aid in behavioral change?
- Goal Type: How do short-term or long-term goal notifications affect behavioral change?
- Creating Notifications: How does using default or manual notifications affect mHealth app engagement?

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