

Romadoro: Leveraging Nudge Techniques to Encourage Break-Taking



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Problem

- ❖ Excessive screen-time has negative impacts on mental and physical well-being, and **taking breaks is important** to keeping creativity, interest, and productivity high [1]. Time management techniques exist to help people regulate their breaks; however, users might ignore the intended breaks. This reduces the productivity and health benefits of taking time off from the screen.

Our Solution

- ❖ Using the **Pomodoro Technique** [1], we built a **Google Chrome plugin** called **Romadoro** to test the effectiveness of computer mediated nudges [2] in motivating users to take breaks.

Definitions

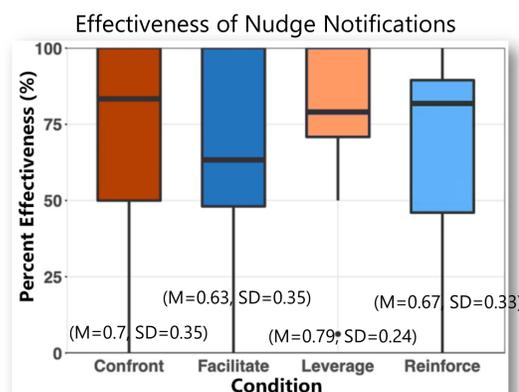
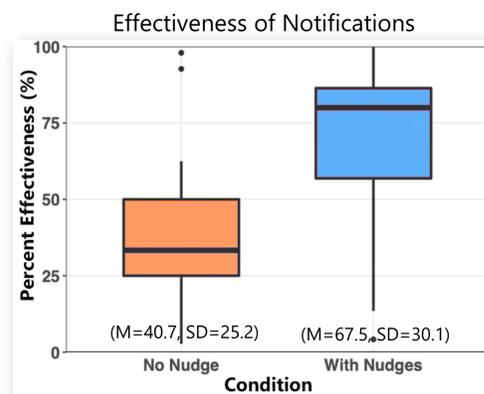
- ❖ **Nudges** are aspects of choice architecture that alter, in a predictable way, the behavior of people [2] – they “nudge” them to behave in a certain way.
- ❖ The **Pomodoro Technique** [1] is a time management method used to promote productivity and focused work through periods of focus followed by regulated periods of rest (breaks).

Method

- ❖ **36 participants** interacted with the **Romadoro** interface over the course of **4 days**. They were split into **two groups** – those who interacted with our interface **without nudges** and those who **had nudges**. Those with nudges interacted with a **different random nudge** each day.

Results

- ❖ Notifications with nudges **are** more effective in motivating users to take breaks than notifications without nudges.
- ❖ $\chi^2(1,34) = 5.14, p < 0.05$



- ❖ We found **no significant difference** in the effectiveness of different nudge techniques in motivating users to take breaks.
- ❖ $\chi^2(3) = 1.46, \eta^2p=0.02, p = 0.63$ (NS)



Dashboard

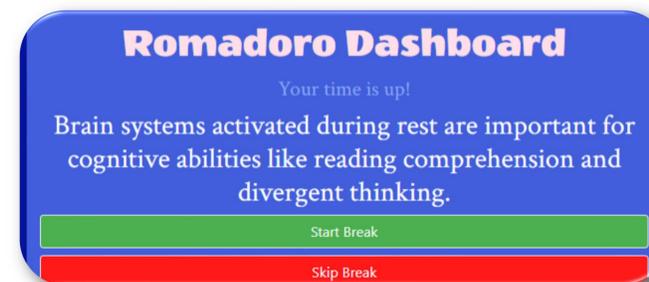
- ❖ Our homepage: **Romadoro Dashboard** – users interacted with the timer, changed the times of their focus sessions and breaks, and viewed how many Pomodoro cycles they completed that day.

Without Nudge Notifications



- ❖ **Default** – Google Chrome notification received by those in the no nudge condition.

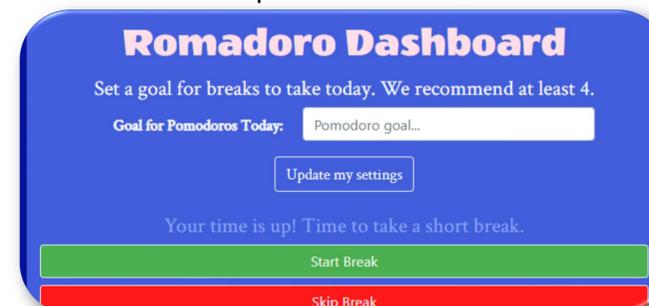
With Nudge Notifications



- ❖ **Confront** – leverages the tendency to make more careful decisions after being made aware of consequences.



- ❖ **Facilitate** - aims to improve the decision-making process by reducing or eliminating mental or physical efforts from the users.



- ❖ **Leverage Social Influence** - uses the human tendency to conform with social “norms” and what people believe is expected of them.



- ❖ **Reinforce** - increase the presence in an individual's thinking and reinforce specific behaviors.