

TimeToFocus: Feedback on Interruption Durations Discourages Distractions and Shortens Interruptions

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Many computer tasks involve looking up information from different sources, and these self-interruptions can be disruptive. In this article, we investigate whether giving people feedback on how long they are away from their task influences their self-interruption behaviour. We conducted a contextual inquiry on self-interruption behaviour in an office workplace. Participants were observed to postpone physical interruptions until a convenient moment in the task if they were expected to take time. In contrast, observations revealed that digital interruptions were addressed immediately; participants reported these were presumed to be quick to deal with. To increase awareness of time spent on digital interruptions, we developed TimeToFocus, a notification tool showing people the duration of their interruptions while working on a task. A field study deployment of TimeToFocus in an office workplace found that feedback on the duration of interruptions made participants reflect on what they were doing during interruptions. They reported that they used this insight to avoid task-irrelevant activities. To confirm whether participants' perceptions of the benefit of the tool could be measured, we conducted an online experiment, where participants had to retrieve information from an email sent to their personal email addresses and enter it into a spreadsheet. Participants who used our tool made shorter interruptions, completed the spreadsheet task faster and made fewer data entry errors. We conclude that feedback on the length of interruptions can assist users in focusing on their primary task and thus improve productivity.

CCS Concepts: • **Human-centered computing** → **Human computer interaction (HCI)**; **Empirical studies in HCI**;

Additional Key Words and Phrases: Interruptions, distractions, workplace, notifications, contextual inquiry, field study, online experiment, focus, productivity, data entry

ACM Reference format:

Judith Borghouts, Duncan P. Brumby, and Anna L. Cox. 2019. TimeToFocus: Feedback on Interruption Durations Discourages Distractions and Shortens Interruptions. *ACM Trans. Comput.-Hum. Interact.* 27, 5, Article 32 (August 2020), 31 pages.
<https://doi.org/10.1145/3396044>

1 INTRODUCTION

The fragmented nature of computer work is well-documented: people often work on several different tasks and activities throughout the day and switch between these every few minutes [13].

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1073-0516/2019/08-ART32 \$15.00

<https://doi.org/10.1145/3396044>