

Text message reminders do not modulate the implementation intention's effect in a digital behaviour change intervention



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There are several cognitive barriers that impede behaviour, even with a strong intention : **motivation is not enough**. Self-regulatory strategies can help people to realize their ambitions and achieve their goals. This study focuses **on implementation intentions (II)**, a specific **if-then type plan able to bridge the gap between intention and action** ("If situation X occurs, then I will do behaviour Y")¹. Forming an if-then plan produces an action control directly driven by the situational cues. Thus, this strategy enhances the probability to acting². Technology, such as **text message reminders (SMS) could support the effect of implementation intentions** by promoting behaviour change over time³. The central aim of the present study is to test whether adding text message reminders to implementation intention is effective in helping people **to maintain a new organizational behaviour during four weeks in a particular pandemic context**.

METHOD

118 people, between the ages of 18 to 62 years old (mean age 33.5 ± 12.85) accepted to participate in the study, presented as a "personal/professional organizational coaching program during a part of lockdown (one month)". They were randomly assigned in one of the four experimental conditions. Their task was **to send their three daily goals every day in a website**.

Control group

No manipulation was conducted.

SMS group

All participants were reminded .The frequency of reminders changed over the four weeks of the study.

II group

Participants were asked to form an II and had to fill the moment of the day (the morning), the time (10:00 AM), the place (in the bathroom), and the event (after I brush my teeth).

II x SMS group

The same manipulations as the II group were conducted, along with reminders. The reminders were sent at the time specified in the implementation intentions plan.

DISCUSSION

Findings show that the two volitional features (forming an implementation intention and receive SMS reminders) are significantly effective, independently of each other. The lack of the expected interaction could be explained by the procedure of our study. the presence of the link directly in the text message can reduce barriers to the practice of behaviour by enhancing the ability to perform the behaviour (i.e., participants could only click on it). Future research will more precisely investigate the type of motivation and their level of self-determination.

RESULTS

As expected, we found a significant main effect of implementation intention, indicating that participants were more likely to send in their goals when they did implementation intention ($M = 0,40$, $SD = 0,35$) than when they did not ($M = 0,31$, $SD = 0,33$) [$F_{1,114} = 4,05$; $p = .047$; partial $\eta^2 = 0,034$] and a significant main effect of reminders, indicating that participants were more likely to send in their goals when they were reminded ($M = 0,40$, $SD = 0,25$) than when they were not ($M = 0,31$, $SD = 0,33$) [$F_{1,114} = 4,17$; $p = .044$; partial $\eta^2 = 0,035$] (see figure 1).

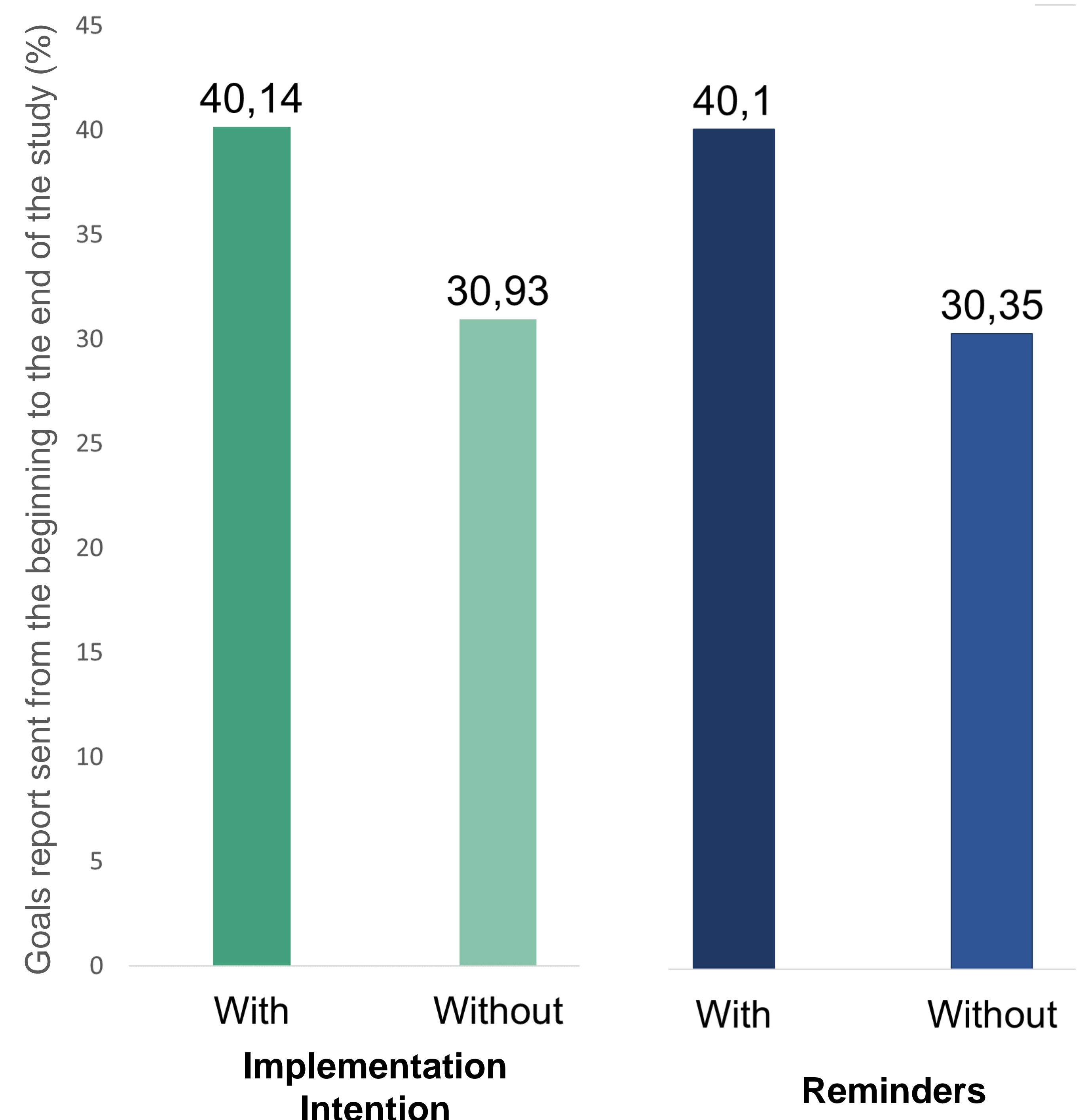


Figure 1. The mean rates of goals reports sent (%) for the two between-subject factors.

No interaction effect between implementation intentions and reminders was observed ($p > .47$). No interaction effect between Week and Implementation intention ($p > .96$), or Week and Reminders was found ($p > .06$).

¹Gollwitzer, P. M., & Brandstätter, V. (1997). Implementation intentions and effective goal pursuit. *Journal of Personality and Social Psychology*, 73(1), 186–199.

²Gollwitzer, P. M., & Sheeran, P. (2006). Implementation intentions and goal achievement: A meta-analysis of effects and processes. *Advances in experimental social psychology*, 38, 69-119.

³Wicaksono, A., Hendley, R., & Beale, R. (2019). Investigating the Impact of Adding Plan Reminders on Implementation Intentions to Support Behaviour Change. *Interacting with Computers*, 31(2), 177–191.