**Supplementary material**

**Method**

Ongoing task. During the baseline block, 50 words were used, of which 10 words were for practice trials. The remaining 40 words were repeated once (each word appeared twice) for the baseline task (80 trials).

Nonfocal EBPM task. Ten non-target words were used for practice (10 trials), which did not include PM trials. After practice, the other non-target words and PM target words were repeated once and presented to participants in two PM blocks such that each block included 158 ongoing trials and 3 PM target trials. Thus, altogether there were 6 PM trials, and they appeared in trials 50/52, 103/99 and 149/150 of each test block (the interval between consecutive PM trials was about 2 min).

TBPM task. 170 words were selected for the task, 10 of which were used for practice, with the rest of the words repeated once in the two PM blocks (each with 160 trials). There were also 6 PM trials in total. In order to avoid confusion, no word included the radical ‘月’ in the TBPM task. When participants made a PM response within 5 s before or after the target time, it was scored as correct.

**Data analysis**

Previous researchers have suggested that people check the clock more frequently as the targeted time for the PM response gets closer (Huang, Loft, & Humphreys, 2014; Waldum & Sahakyan, 2013). In order to explore the trend of clock checking frequency before each PM target time, we divided the time period before each PM target time (2 minutes) into four 30-second periods (1st period: 0-30s, 2nd period: 30-60s, 3rd period: 60-90s, 4th period: 90-120s) (Albinski, Kliegel, Sedek, & Kleszczewska-Albinska, 2012; Li, Weinborn, Loft, & Maybery, 2014). We then calculated the mean clock checking frequency across all six PM trials in each period. We further conducted a 2 (PM instruction type: II, typical) × 2 (Group: patients with SCZ, HC) × 4 (Time course: 0-30s, 30-60s, 60-90s, 90-120s) mixed ANOVA on clock checking frequency.

**Results**

For the time course of clock checking, the mixed ANOVA demonstrated a significant main effect of PM instruction type (*F*(1,63) = 4.09, *p* = 0.048, *ηp2* = 0.061), with participants in the II condition showing a higher frequency of clock checking than participants in the typical instruction condition. Moreover, there was a significant main effect of Time course (*F*(1,63) = 44.04, *p*<0.001, *ηp2* = 0.684). Clock checking frequency significantly increased as the PM target time approached. There was no significant main effect of Group, indicating that the two groups did not show a significant difference in the clock checking frequency. There was a significant interaction between Group and Time course (*F*(1,63) = 6.66, *p* = 0.001, *ηp2* = 0.247), indicating that patients with SCZ showed a lower clock checking frequency than HC at the 4th time period (*t*(65) = -2.18, *p* = 0.033, Cohen’s *d* = -0.54), which was the time period closest to the PM target time. The interaction between PM instruction type and Time course and the three-way interaction were not significant.

**Discussion**

In our study, we found significantly less clock checking behaviors at the 4th time period in SCZ compared to HC. It is noteworthy that the 4th time period is the closest to the target time. This finding is consistent with previous studies. For example, Shum, Ungvari, Tang, & Leung (2004) found that when compared to controls, patients with SCZ showed less clock checking during the periods near the PM target time.

**Reference**

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