

Effect of Perceived Importance of a Task in the Prospective Memory Task

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Abstract : In the present study, we reanalyzed lapse errors in the last phase of a job, by re-counting near lapse errors and increasing the number of participants. We also examined the results of this study from the perspective of prospective memory (PM), which concerns future actions. This study was designed to investigate whether perceiving the importance of PM tasks caused lapse errors in the last phase of a job and to determine if such errors could be explained from the perspective of PM processing. Participants (N = 34) conducted a computerized clicking task, in which they clicked on 10 figures that they had learned in advance in 8 blocks of 10 trials. Participants were requested to click the check box in the start display of a block and to click the checking off box in the finishing display. This task was a PM task. As a measure of PM performance, we counted the number of omission errors caused by forgetting to check off in the finishing display, which was defined as a lapse error. The perceived importance was manipulated by different instructions. Half the participants in the highly important task condition were instructed that checking off was very important, because equipment would be overloaded if it were not done. The other half in the not important task condition was instructed only about the location and procedure for checking off. Furthermore, we controlled workload and the emotion of surprise to confirm the effect of demand capacity and attention. To manipulate emotions during the clicking task, we suddenly presented a photo of a traffic accident and the sound of a skidding car followed by an explosion. Workload was manipulated by requesting participants to press the 0 key in response to a beep. Results indicated too few forgetting induced lapse errors to be analyzed. However, there was a weak main effect of the perceived importance of the check task, in which the mouse moved to the "END" button before moving to the check box in the finishing display. Especially, the highly important task group showed more such near lapse errors, than the not important task group. Neither surprise, nor workload affected the occurrence of near lapse errors. These results imply that high perceived importance of PM tasks impair task performance. On the basis of the multiprocess framework of PM theory, we have suggested that PM task performance in this experiment relied not on monitoring PM tasks, but on spontaneous retrieving.

Keywords : prospective memory, perceived importance, lapse errors, multi process framework of prospective memory.

Conference Title : ICCS 2015 : International Conference on Cognitive Science

Conference Location : Venice, Italy

Conference Dates : November 09-10, 2015