In order to support students with writing difficulty at school, it is necessary for us to develop effective methods of assessment and support. Previous research has shown that visual-motor integration (VMI) skills are strongly correlated with performance in writing and copying tasks. VMI skills are usually measured by using a battery of tests or by analyzing the results of writing performance itself. These analyses do not include the pattern of eye-movements during writing. In this study, using their VMI scores, the author examined whether the female participants showed different patterns of eye-movement while copying Japanese passages. The author prepared meaningful and meaningless Japanese passages with the number of letters controlled. Participants were instructed to write down the four passages presented on the built-in eye-tracker display and their eye-movements while writing were recorded. Although their copying time did not differ, participants with high VMI scores showed a fewer number of fixations, shorter duration of fixation, and fewer look-backs than those with low VMI scores. Our results suggest that being aware of the number of look-backs while writing in a school setting can help teachers identify potential writing difficulties for their students.

Key words: eye-movements during writing (書字中の視線パターン), visual-motor integration (視覚運動協応), copying (視写), number of look-back (視線逸脱回数)