The Dimensional Change Card Sort (DCCS) task is a widely used measure for the development of executive function during early childhood. In this task, children are asked to sort cards according to one rule (e.g., color) during preswitch phases, after which they are asked to sort cards according to another rule (e.g., shape) during the postswitch phases. A computer version of the DCCS was needed to standardize the test material, but a previous study showed that children showed more difficulty in a computer version with a mouse device than the standard card version. In this study, we assessed the effectiveness of a computer version with a touch panel and compared performance with the standard card version. Three- and 4-year-old children were given the card version and computer version of the DCCS tasks. The results revealed that children showed similar performance during the preswitch and postswitch phases both in the computer version and in the card version. The results suggest that both versions of the task assessed the same underlying cognitive processes.

**Keywords:** executive function, preschool children, DCCS task, computer, touch panel.

*The Japanese Journal of Psychology*

2016, Vol.87, No.2,