

ORIGINAL ARTICLE

Influences of Stimulus Array, Stimulus Material, and Severity Level for Intellectual Disability on the Cancellation Task in People with Intellectual Disabilities

Ryotaro SAITO¹⁾ Yoshifumi IKEDA^{1) 2)} Hideyuki OKUZUMI¹⁾

1) Faculty of Education, Tokyo Gakugei University

2) Research Fellowship of the Japan Society for the Promotion of Science

ABSTRACT

A cancellation task is a paper-and-pencil test that requires placement of a mark through each occurrence of a specific target displayed in an array of distracters on a sheet of paper, as quickly and accurately as possible. This study investigated performances of intellectual disabilities in cancellation tasks with various stimulus arrays and stimulus materials. Participants were 13 people with mild to moderate intellectual disabilities and 13 people with severe or profound intellectual disabilities. The experimental design was a three-way mixed model with severity level for intellectual disability (mild to moderate, severe or profound) as a between-subjects factor and stimulus array (random, orderly) and stimulus material (number, mirrored number) as within-subjects factors. Number of errors, times to complete the task, and the performance score was used in the analysis. The results revealed that people with mild to moderate intellectual disabilities showed better performance than people with severe or profound intellectual disabilities. The results also revealed that performances were higher in the orderly array than in the random array. These results suggest that cancellation in people with intellectual disabilities is affected by severity level of intellectual disability and stimulus array, respectively.

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s121014s@st.u-gakugei.ac.jp (Ryotaro SAITO)

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