

Poster presentation

Differences of IQ among ADHD children with modality-specific attention problem

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Background

The purpose of this study was to investigate differences of IQ among ADHD children that show attention differences against visual stimuli or auditory stimuli.

Materials and methods

Using Continuous Performance Test, visual attention and auditory attention of 73 children diagnosed as ADHD were measured. According to the test results, they were divided into 3 groups – the group that showed both visual and auditory attention problem (VA group, $n = 40$), the group that showed only visual attention problem (V group, $n = 14$), the group that showed only auditory attention problem (A group, $n = 19$). Then, several results using 'Korean Educational Development Institute-Wechsler Intelligence Scale for Children (KEDI-WISC)' were compared among 3 groups.

Results

1) The scores of digit span ($p < 0.05$) and similarities ($p < 0.05$) of the V group were significantly higher than those of the A group. Also, the score of Kaufman's factor 3 ($p < 0.05$) of the V group was significantly higher than that of VA and A group. 2) There were no significant differences of all IQ scores between VA group and A group. 3) The IQ score of V group, the group that showed auditory attention problem regardless of visual attention (VA+A group), and ADHD group accompanied by learning disorder (ADHD+LD group, $n = 25$) were compared. On the IQ scores of language domain ($p < 0.01$) and attention domain ($p < 0.05$), 3 groups were significantly different. V group show the highest IQ score, and ADHD+LD group show the lowest one.

Discussion

The several parts of IQ of the ADHD children showing visual attention problem but not showing auditory attention problem were superior to those of the other ADHD groups. Especially the language and attention domain of IQ of the ADHD children showing visual attention problem but not showing auditory attention problem were superior to those of the ADHD group accompanied by learning disorder.

References

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