Analyzing latent groups and sequential effects in the DCCS task

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Abstract: Analyzing latent groups and sequential effects in the DCCS task

A widely investigated paradigm to study mental set shifting is the Dimensional Change Card Sorting (DCCS) task. In the current project we used a latent variable technique, mixture distribution analysis to investigate DCCS task data. This method offers several advantages. As yet, a measure of accuracy and the number of children passing the task have been studied separately. In a mixture distribution analysis, group differences on both aspects can be evaluated simultaneously. Given the lack of variance and the bimodal nature of most DCCS task data, the majority of research evaluates the results categorically. The cut-off score used is rather arbitrary. Mixture analysis results in the division of the groups that fits the data best. Finally, with latent Markov analysis sequential effects within the post-switch trials can be detected in order to see if there is a learning effect within the six post-switch trials.