

# Double Group-oriented Contingencies and Cooperative Behavior

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## Abstract

**Study objective:** To examine the effects of double group-oriented contingencies on cooperative behavior in group tasks. Double group-oriented contingency refers to the combination of interdependent group-oriented contingencies in a group and between groups. **Design:** Alternating treatment design. **Setting:** Experimental room. **Participants:** Four graduate students divided into groups of two. **Procedure:** The task was performed in an experimental room. The task was a game conducted using the roles of A, which carries blocks, and B, which classifies blocks according to color. One game lasts two minutes. Scores were added only for role B. The game was repeated, alternating the role with every game. **Intervention:** Double group-oriented contingencies, synchronization of the area where both groups performed the task and instruction. **Measures:** Occurrences of behavior that enables the partner to carry more blocks. **Result:** When intervention was implemented, the occurrences of cooperative behavior in the group increased. In addition, changes in the performance within the group were linked. **Conclusion:** The application of double group-oriented contingencies was effective in increasing cooperative behavior in the group. It is suggested that the first cooperative behavior in the group is establishing the operation of the cooperative behavior of a partner. Additionally, it is considered that cooperative behavior in the group is maintained by negative reinforcement. **Study significance:** Cooperation has been used in contrast to competition for behavior analysis. This study is the first study dealing with an experimental setting including competition and cooperation. In addition, in studies of group-oriented contingencies, this study is the first study that examined an experimental setting with the combination of interdependent group-oriented contingencies in a group and between groups. Furthermore, this study is the first study to suggest that other groups could be of variable cooperative behavior in the group. Therefore, this study is expected to show a new paradigm regarding behavior analysis.