

# **Efficiency and Flexibility of Individual Multitasking Strategies - Influence of Between-Task Resource Competition**

**Jovita Bruening**

Technische Universität Berlin, Berlin, Germany

**Marie Mckstein**

Technische Universität Berlin, Berlin, Germany

**Dietrich Manzey**

Technische Universität Berlin, Berlin, Germany

## **Abstract**

Evidence exists that individuals prefer distinguishable strategies for self-organized task scheduling in multitasking. They either prefer to work for long sequences on one task before switching to another (i.e., blocking), to switch repeatedly after short sequences (i.e., switching), or to process the current stimuli of two tasks before responding almost simultaneously (i.e., response grouping). We tested whether the strategies efficiency differs depending on the resource competition between tasks in a free concurrent dual-tasking paradigm and whether individuals adapt their strategies accordingly. Our results show that switcher and response grouper are more efficient than blocker during low than high resource competition between tasks. Comparably, more switchers shifted to a response grouping strategy than blockers towards a switching strategy. Overall, especially those individuals benefited from a lower resource competition, who already preferred a more flexible approach in dealing with the multitasking demand during high resource competition.