

# CAN THE FOCUS OF ATTENTION ACCOMMODATE MULTIPLE, SEPARATE ITEMS?

Amanda L. Gilchrist

Dr. Nelson Cowan, Dissertation Supervisor

## ABSTRACT

Researchers of working memory currently debate capacity limits of the focus of attention, the proposed mental faculty in which items are most easily accessed. Cowan (1999) suggested that its capacity is about 4 chunks, whereas others have suggested that its capacity is only 1 chunk. Recently, Oberauer and Bialkova (2009) found evidence that 2 items could reside in the focus of attention, but only because they were combined into a single chunk. We modified their experimental procedure, which depends on a pattern of switch costs, to obtain a situation in which chunking was not likely to occur (i.e., each item remained a separate chunk), and still obtained results consistent with a capacity of at least 2 items. Therefore, either the focus of attention can hold multiple chunks, or the switch cost logic must be reconsidered.

Key words: Focus of attention, capacity, working memory capacity, switch costs, reaction time