WORKING MEMORY CAPACITY – FACETS OF A COGNITIVE ABILITY CONSTRUCT

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ABSTRACT. Working memory capacity is differentiated theoretically along two dimensions: contents and functions. The resulting $3 \times 3$ matrix was operationalized by 23 tasks sampled from the literature. Data for these tasks from 128 participants were analyzed by exploratory and confirmatory factor analysis. Regarding the content facet, spatial working memory was clearly distinct from the other two content categories. A distinction between verbal and numerical working memory was not warranted. On the functional dimension the postulated categories of simultaneous storage and transformation and of coordination could not be separated. The third category was clearly separate from the first two functions. This factor could be interpreted to respect a mixture of variance due to mental speed and to supervisory functions of the central executive.

Published in: