

Almut Hupbach, *Age-related differences in conceptual implicit memory tests. An experimental study with children*, Diss. Trier, 2000

In the past twenty years considerable research has focused on the distinction between implicit and explicit measures of retention. In implicit memory tests, subjects are asked to perform a task that is apparently not related to a previous study phase, e.g. to produce category exemplars or to complete word stems. Implicit memory is revealed when the previous exposure to stimuli facilitates later performance in the implicit memory task relative to a nonstudied baseline performance. Implicit memory tests are contrasted with explicit memory tests, such as recall or recognition that require an intentional recollection of previous experiences. So far, only few studies on the development of implicit memory have been published. Despite the relative paucity of research with children, findings have been quite consistent: While explicit memory improves with age, no age differences were found in implicit memory tests. In these studies, however, mainly perceptual implicit memory tests have been employed. In recent studies with adults, dissociations have been observed between different implicit tests, especially between perceptual and conceptual ones. To draw conclusions about the developmental invariance of priming from findings using only one single type of test thus seems premature.

In the present study, six experiments have been conducted that compared the memory performances of preschoolers and school-aged children using conceptual implicit tests (category production and word association). Conceptual priming effects rely on conceptual knowledge and conceptual processes (e.g., organization, semantic elaboration). Age-related improvements were found in both conceptual tests. This finding is interpreted in the context of a more elaborated knowledge base and enhanced processing abilities of older children.

In contrast to the hypothesis that implicit memory is in general age-invariant, the results of this study suggest that at least conceptual implicit memory is influenced by developmental changes.