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How Can We Promote Cognitive Reserve During the Life Course? Social, Behavioral, Contextual Factors

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*Background.* In order to live autonomously up to old age, the concept of cognitive reserve claims that it is vital to build up cognitive capacities throughout the life course. Although much evidence points to social, behavioral, and contextual influences on cognitive function over the life course, the rapidly evolving field calls for a summarizing review on how to promote cognitive reserve during early and mid-adulthood.

*Method.* ISI Web of Science and Google Scholar were searched for peer-reviewed articles on cognitive function/decline in 2013 and an additional search was carried out in the beginning of 2015. Articles were particularly reviewed for social and behavioral factors, new methodologies and new research strands evolving from the field.

*Results.* Prominent individual factors for cognitive reserve according to the review were parental and individual socioeconomic status, education, work environment, lifestyle, and leisure activities. Newly identified influences on population-level cognitive function investigated with innovative research methodology were considered duration of compulsory schooling (natural experiments), contextual influences such as neighborhood socioeconomic status (multilevel methodology), transition to retirement (instrumental variable approaches), and exposure to economic recessions (fixed-effects models).

*Discussion.* The concept of cognitive reserve has received increasing attention and validation over the last years, and social, behavioral, and contextual factors with potential to promote cognitive reserve have been identified. It can only be speculated though how these factors can balance or even override ‘normal’ biological aging. Evidence on early and mid-adulthood influences on later-life cognitive function should be used to promote cognitive reserve in every stage of life.