Psychosocial influences on cognitive aging: The impact of control beliefs on response time inconsistency

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TOPIC/TARGET AUDIENCE: Public health professionals with a focus on cognitive aging and adult development and aging areas of research and practice.

ABSTRACT: Background/Purpose: Control beliefs are malleable psychosocial factors that have been linked to various cognitive domains (e.g., memory performance) in aging populations. It is unclear whether variation in control beliefs is related to response time inconsistency (RTI; trialto-trial fluctuations on a response time task), a putative early indicator of cognitive aging. Employing an intraindividual variability approach, we examined associations between two dimensions of control beliefs, personal competence and locus of control, and RTI both at the level of individual differences and within-persons across time. Methods: Control beliefs and RTI were measured weekly for five weeks in a sample of 304 community-dwelling older adults (Mage= 74.11 years, Range=64-92, 68.58% Female). Results/Outcomes: Individual differences in control beliefs were related to RTI such that having lower personal competence, but not locus of control, was associated with significantly higher RTI (p<.01). In contrast, within-person variation in control beliefs was related to RTI revealing that when locus of control, but not personal competence, was lower than usual, RTI was significantly higher (p<.01). Conclusions/Implications: Our findings indicate that control beliefs are important psychosocial markers of cognitive aging, and imply that augmenting control beliefs may be beneficial for promoting cognitive health in old age.

OBJECTIVE(S):

- Describe the between- and within-person associations between psychosocial factors (control beliefs) and an early indicator of cognitive aging (response time inconsistency).
- Differentiate the impact of personal competence and locus of control on response time inconsistency.
- Formulate ideas for more personalized cognitive interventions and public health initiatives incorporating an individual's control beliefs.

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