

Aging and decision making

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Making good decisions is a fundamental ability at any age. Old people too have to make important decisions which can have a huge impact on life, not only in the nearer but also in the farer future. Decisions may, for example, regard retirement, financial issues or health care. Lifespan developmental changes in laboratory decision tasks have been observed. Performance is found to improve with increasing age until adulthood, while it appears to decline in older age. Recent studies have shown that a subgroup of old adults makes disadvantageous decisions when situations are ambiguous and information about risks and outcomes' probabilities is not explicitly given (e.g., Denburg et al., 2005; Zamarian et al., 2008). These old people also appear to more likely fall pray of deceptive advertising, suggesting compromise of real-world judgments (Denburg et al., 2007). Despite their cognitive impairments, old persons with dementia are also required to make important decisions. These decisions are sometimes particularly difficult as the progress of disease and its impact on the living situation are incalculable variables. Impairments in decision making have been described in association with neurodegenerative conditions such as Parkinson's disease, Huntington disease or Korsakoff syndrome, but very few studies have focused on Alzheimer's disease (AD). Two recent studies by our working group (Delazer et al., 2007; Sinz et al., 2008) suggest that mild AD patients have problems making advantageous decisions in both situations of ambiguity and of risk. Whether patients' decision deficits are related to biases in the interpretation of information has been so far not investigated. Human choices are sensibly influenced by the way options are presented (*framing effect*). Typically, positively framed options (50% chance of win) elicit an increase in preference relative to negatively framed options (50% chance of loss). Results of a preliminary study show that mild AD patients' judgments are biased by the frame of information more than normal peers' judgments. These results add to the investigation of decision deficits in mild AD and suggest that problems in the elaboration and interpretation of information may also contribute to poor decisions of old people with slight cognitive impairments.