

## Accepted Manuscript

Decision making and age: Factors influencing decision making under uncertainty

Alec N. Sproten , Carsten Diener , Christian J. Fiebach ,  
Christiane Schwieren

PII: S2214-8043(18)30315-X  
DOI: [10.1016/j.socec.2018.07.002](https://doi.org/10.1016/j.socec.2018.07.002)  
Reference: JBEE 371



To appear in: *Journal of Behavioral and Experimental Economics*

Received date: 7 November 2016  
Revised date: 7 July 2018  
Accepted date: 9 July 2018

Please cite this article as: Alec N. Sproten , Carsten Diener , Christian J. Fiebach ,  
Christiane Schwieren , Decision making and age: Factors influencing decision making under uncer-  
tainty, *Journal of Behavioral and Experimental Economics* (2018), doi: [10.1016/j.socec.2018.07.002](https://doi.org/10.1016/j.socec.2018.07.002)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Highlights

- Two experiments were run to investigate age effects on uncertain decisions
- Uncertainty condition, feedback, and learning requirements were manipulated
- No age differences were found in risky conditions with a priori probabilities
- But well under ambiguity with feedback and under risk with statistical probabilities
- Several explanations for these effects are discussed

Decision making and age: Factors influencing decision making under uncertainty

Authors - affiliations:

Alec N. Sproten - University of Erlangen-Nuremberg, Lehrstuhl für Volkswirtschaftslehre, insb. Wirtschaftstheorie, Lange Gasse 20, 90403 Nürnberg, Germany. Correspondence to: alec.sproten@fau.de

Carsten Diener - Department of Applied Psychology, Division for Clinical and Biologic Psychology, SRH University of Applied Sciences Heidelberg, Maria-Probst-Str. 3, 69123 Heidelberg, Germany.

Christian J. Fiebach - Department of Psychology, Goethe University Frankfurt, Mertonstr. 17, 60325 Frankfurt am Main, Germany.

Christiane Schwieren - Alfred Weber Institut für Wirtschaftswissenschaften, Heidelberg University, Bergheimer Str. 58, 69115 Heidelberg, Germany.

Abstract:

*In the present study, we investigate how decision making under uncertainty is affected by age. We ran two experiments with young and older adults, systematically manipulating (1) uncertainty conditions (risk and ambiguity), (2) feedback on decisions and (3) requirements of the task regarding executive functions. Experiment 1 aims at investigating risk with a priori probabilities and ambiguity and the effects of feedback in a card game ( $N = 200$ ; older adults: 97). The results reveal no age differences in choice behaviour under risk with a priori probabilities. If feedback is provided, we find that older adults are less ambiguity averse than young adults, whereas there is no significant age difference if no feedback is provided. Moreover, the presence of feedback had a positive effect on the propensity to gamble in uncertain conditions by influencing subjective probabilities for both age groups. Experiment 2 uses the Balloon Analogue Risk Task (BART) to investigate decision making with statistical probabilities ( $N = 100$ ; older adults: 50). Here we report older adults being more risk averse, an effect that can be explained with age differences in sensitivity to prior choices. We support the results by comparing them to survey data and conclude that differences in uncertainty-processing exist between young and older adults. Possible explanations of these differences are discussed.*

Download English Version:

<https://daneshyari.com/en/article/9952861>

Download Persian Version:

<https://daneshyari.com/article/9952861>

[Daneshyari.com](https://daneshyari.com)