Term Paper

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Term Paper

Here comes the introduction, research and hypotheses.

Methods

Participants

The data set analysed for this term paper consists of experimental and covariate data of $N = 726$ participants. Of these, $n = 362$ were younger adults ($M = 31$ years, $SD = 3.4$, age range $20 - 40$), while the other $n = 364$ were older adults ($M = 73$ years, $SD = 3.8$, age range $64 - 88$). There is no further demographical data available.

Procedure & Design

Participants completed several standardised psychometric tests on episodic memory, fluid intelligence, speed of processing, and working memory. The latter was operationalised based on the performance in three different tasks, namely Letter Updating Task, Spatial Updating Task, and Number-N-Back Task. Of the acquired covariates only the working memory data will be used in the following analysis. The working memory score is missing for 148 participants (20 %).

Participants took part in a delay discounting experiment, where they were asked to make binary choices between an early and a late monetary reward. The early option was presented on the left side of the screen and offered a reward in the range of \$10 and \$24.99 ($SD = \$4.3$) that was varying randomly throughout the experiment. The late option was always presented on the right side of the screen and differed from the first either 1 %, 10 %, 20 %, 30 %, or 50 %. This resulted in an absolute value between \$10.10 and \$37.48 ($SD = \$6.1$). The percentage of difference between early and late option was also randomised within participants. The early option was either promising the reward on the same day (further referred to as immediate option) or in two weeks (delayed option). The delay between the early and the late option was either two, four, or six weeks. Both of

these manipulations were varying randomly within participants. For each trial participants had to indicate via button press if they choose the early or the late option. The behavioural data acquired was the binary choice per trial as well as the reaction time (from trial onset until button press in ms). Each combination of choice parameters (% difference, option, delay) was repeated four times, resulting in a total of 120 trials.

Data Analysis

Preprocessing

The trials in which no response was given were discarded in favour of analysis (0.9 % of all acquired data). All participants had over 80 % of valid trials and thus were kept in for analysis. Due to the distribution of reaction times being right-skewed (skewness = 0.99), reaction times were log-transformed for the following analysis.

To correct for outliers, 135 trials with reactions too fast were discarded (cutoff at 300 ms). This decision relies on the assumption, that participants making a decision prior to 300 ms were presumably pressing before having processed the choice options fully.

Model

Results

Table 1 summarizes the data. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi,

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Table 1

Sample Basic Table

Item		
Animal	Description	Price
Gnat	per gram	13.65
	each	0.01
Gnu	stuffed	92.50
Emu	stuffed	33.33
Armadillo	frozen	8.99