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Evaluation of short time spans in the norm: age
and other determinants

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The paper presents a comparative analysis of evaluations of short time spans in the norm. The authors compared the results shown by people of different age, gender, educational level, social status, and manual preference. 364 mentally healthy individuals voluntarily participated in the study. The number of young people (20–30 years old, 22 ± 2.9 on average) was 176, the number

of older adults (50 or more years old, 59 ± 8.6 on average) – 188. The surveyed sample consisted of 140 men and 224 women. 265 people had higher education, while 99 people had secondary education. The number of older employees was 132, while the number of unemployed or retired people was 56. Most of the study participants were right-handed (336 people). To analyze the age dynamics in evaluating short time intervals, the group of older participants was divided into several subgroups: 50–59 years old; 60–69 years old; 70–90 years old. The participants evaluated the duration of four intervals (10, 5, 15, 10 seconds) between two clicks of the stopwatch, and then re-evaluated the 10-second interval. Qualitative and quantitative analysis of the results involved modern methods of statistical data processing and showed that younger people are more likely to evaluate short time spans accurately. They are likely to have more accurate estimates and less errors when overestimating or underestimating stimuli. Individuals of different age have common trends in performing short-interval evaluations: for example, the predominance of short-interval overvaluation. However, the number of overvaluations increases with the increase in age. The study found a number of differences in the estimation of intervals between men and women. A positive effect of high educational level and professional activity on the assessment of short time intervals was also found. In particular, the error magnitude decreased in case of overestimating or underestimating the given span.

Key words: short time intervals, evaluation, determinants, age, aging, brain mechanisms

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