The alteration of time perception across life span

An enormous literature exists about the mechanisms of prospective and retrospective time perception. Previous findings suggest that cognitive factors (besides biological and neural factors) play an important role in order to explain, whether we perceive the duration of a certain time span as short or long. An often reported common sense phenomenon is the alteration of time perception across the life span. Most people will agree that time seems to pass increasingly faster with increasing age (Friedman & Janssen, 2010; Wittmann & Lehnhoff, 2005). To answer the question why this might be the case, astonishingly little information is available about the underlying mechanisms of the described 'age phenomenon'. The existing findings in the field of cognitive science suggest that attention and memory processes might be promising candidates to explain the 'age effect' of time perception. One possible explanation could be that cognitive schemata develop over the life span on the basis of previous learning experiences. Once established, cognitive schemata will yield a faster processing of repeated experiences, and therefore, presumably cause a shorter perceived duration. Since with increasing age it is more likely that a cognitive schema of an experienced situation already exists, this could be an explanation for the impression that time passes faster with increasing age. My interest of research is to investigate the 'age phenomenon' of time perception in order to discover the underlying mechanisms. In doing so, it seems to be important to consider besides the cognitive factors also the alteration of biological and neurological processes over the life span. I will introduce the planned research project as well as the results of a first study on the effect of repeated stimulus exposures on time perception.

Friedman, W. J., & Janssen, S. M. J. (2010). Aging and the speed of time. *Acta Psychologica, 134*, 130-141.

Wittmann, M., & Lehnhoff, S. (2005). Age effects in perception of time. *Psychological Reports, 97*, 921-935.