

People differ in their preferences regarding the optimal hours for waking up and falling asleep. Scientists use the term chronotype or the morningness-eveningness dimension to describe these differences. Individuals with elevated morning preferences go to bed and wake up early, while individuals with evening preferences go to bed and wake up later. However, the vast majority of the human population does not display pronounced circadian preferences and is intermediate in this regard. Differences between morning and evening types are not limited solely to the timing of sleep and waking up. They may also manifest themselves in several characteristics, such as cognitive effectiveness, educational achievement, life satisfaction, burnout, and personality. Research shows that evening types are more prone to developing affective disorders such as depressiveness and anxiety and show impaired ability to regulate negative emotions.

The current literature offers several possible explanations for the relationship between eveningness and affective disorders and emotional functioning, suggesting biological and social explanations. Considering the first one, research indicates that the expression of clock genes (e.g., CLOCK, TIMELESS) may determine the human chronotype, and these genes are also associated with affective disorders. Among the social explanations, the one related to the morning orientation of the social clock is most often mentioned. Due to the early hours of starting school or work, evening types are often forced to function at a time incongruent with their chronotype. Such misalignment between the biological and social clock referred to as social jetlag, is associated with several mental health outcomes such as anxiety and depression.

Social jetlag is reflected in a discrepancy between sleep time on weekdays and weekends or, more precisely, between workdays and free days. Research indicates that in the studying/working population, social jetlag is a prevalent phenomenon experienced by individuals throughout their whole study/work career; however, evening types experience it more often. Apart from the impact of social jetlag on emotional functioning, it can also be associated with academic performance, unhealthy dietary habits, lead to chronic fatigue, or affective disorders.

For all this reason, it is essential to look for factors that can minimize the magnitude of various negative consequences of eveningness and social jetlag. In the current project, we will focus on finding factors that support coping with social jetlag as well as evening preferences on two significant levels: attenuate the various aspects of negative affect and amplify the various aspects of positive affect. Moreover, based on the results of our previous study, we wish to verify the influence of mindfulness training on the relationship between chronotype and social jetlag with the aspects of positive and negative affect. We will focus on differential variables that have a regulatory nature, can be supported by targeted interventions and exercise, and have already proved to be associated with diurnal preferences and affective functioning.

The results of the research planned in this project, apart from their obvious importance for developing knowledge in the field of chronopsychology, could be a starting point for a social discussion of the evening types' needs. Moreover, finding supporting factors that could help minimize the risk of various diseases or disorders and maximize employees' and pupils' engagement and well-being seems crucial. Popularization of the results may also contribute to changes in the social perception of evening types in the case of whom diurnal preferences may lead to stigmatization, perceiving them as lazy, or less productive.