

Research on emotions is one of the pillars of health psychology. Numerous psychological recommendations have focused on enhancing health by influencing the individual aspects of emotional life. Until now the phenomenon was analyzed partially. For decades psychology has focused on harmful consequences of negative emotions (such as fear, sadness, anger, benefits of positive emotions and a complex role of mixed emotions, i.e. positive and negative emotions that occur simultaneously).

The new concept of emodiversity (emotional diversity) offers an integrative approach to the psychology of emotion, integrating decades of research on emotions and health. Recent studies have shown that the abundance of different emotions in life is a better predictor of physical and mental health than the positive or negative emotions studies separately. A study with a large sample of 37 000 individuals showed that people with a richer emotional life require fewer medical attention and more often do not show symptoms of depression. These relationships proved to be independent of age, gender or personality. Thus, emotional diversity is a strategic new direction of research that can significantly extend the understanding the role emotions play in live, as well as how they translate into health. Experimental research in this field can bring a breakthrough in creating new strategies that promote physical health.

We propose that physiological mechanism mediating the effects of diversity emotional health is the enhanced vagal tone, a phenomenon observed within the function of autonomic nervous system. Vagal tone is represented by subtle changes in the heart rate that reflect the inhibitory effect of vagus nerves that protects against excessive arousal. It has been shown that vagal tone is an important physiological parameter related to the health as well as emotional and social functioning. The effect of vagus nerve activity on the heart and cardiovascular system manifests in mammals, including humans, by playing the key role in the regulation of behavior in social situations.

For these reasons, the aim of our project is to analyze differences in the work of the cardiovascular system (e.g. vagal tone) between people with high and low emotional diversity. Using our state-of-the-art. laboratory will to take measurements during simulated social situations, so that we can observe the hypothesized mechanisms mediating between emotional life and better health.